MINERALS AND METALS SECTOR

SECTEUR DES MINÉRAUX ET DES MÉTAUX

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2000-2001

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Preface

This report is a compilation of information relating to mines and processing facilities in Canada. The information was obtained primarily, as in previous years, by means of a questionnaire sent to all the companies concerned.

The first part, "Metal and Industrial Mineral Mines and Processing Plants in Canada," lists significant information concerning Metal Mines and Processing Plants, Industrial Mineral Mines and Processing Plants, and Lime Producers in Canada. This information includes the name of the operator, the location and type of the mine or plant, and the mine or plant's capacity, processes, products, and other details of special interest.

The second part, "Metallurgical Works in Canada, Nonferrous and Precious Metals," lists the principal metallurgical works in Canada that treat ores and concentrates of nonferrous and precious metals. Not listed are foundries, fabricating plants, and those companies that basically refine scrap and other secondary materials.

The cooperation of all those companies who contributed information and the individuals who assisted in the revision of this report is greatly appreciated.

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NOTE TO READERS

This publication has been prepared on the basis of information available at the time of writing and is accurate to the best of our knowledge. The author makes no warranty of any kind with respect to the content and accepts no liability, either incidental, consequential, financial or otherwise, arising from the use of this document. Any errors or omissions should be reported to Agathe Jérôme by telephone at (613) 992-6065 or 1-800-267-0452, by facsimile at (613) 992-5565, or by e-mail at ajerome@nrcan.gc.ca.

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Abbreviations

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**	not available
C	concentrator
C.I.L.	carbon-in-leach
C.I.P.	carbon-in-pulp
COMEX	Commodities Exchange, Inc.
conc.	concentrate
CRED	Copper Refining Electrowinning Department
E	east
g/t	grams per tonne
hr	hour
ISO	International Standards Organization
KCl	potassium chloride or muriate of potash
kg	kilograms
km	kilometres
lb	pounds
lb/y	pounds per year
M	mill
mm	millimetres
Mo	molybdenum
Mt	million tonnes (or megatonnes)
Mt/y	million tonnes per year
N	north
NE	northeast
NSR	net smelter royalty
NW	northwest
O	open-pit mine or quarry
oz	ounces
P	plant
S	solution mine
SE	southeast
SW	southwest
t	tonnes
t/d	tonnes per day
t/h	tonnes per hour
t/y	tonnes per year
tU	tonnes of uranium
Twp.	township
U	underground mine
W	west
y	year

Metric Conversion Factors

1 tonne	=	1.1023 short tons
1 tonne	=	0.9842 long tons
1 m	=	1.0936 yards
1 g	=	0.0321 oz (troy)

METAL AND INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS IN CANADA

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NEWFOUNDLAND AND LABRADOR							
Cliffs Mining Company Wabush Mines P.O. Box 878 Sept-Îles, Quebec G4R 4L4 Contact: Mr. Stephen Fontanals Telephone: (418) 964-3006 Facsimile: (418) 962-0209	Scully mine and concentrator, Wabush, Labrador	O	1965	16 900 iron ore conc.	Crush and grind, spiral and high-tension separation of specular hematite	Iron ore conc.	Conc. shipped to Pointe-Noire, Quebec, for pelletizing; iron ore pellets shipped to steel plants in North America and Europe through participating companies: Stelco Inc., Dofasco Inc., Acme Steel Company, and Cleveland-Cliffs Inc.
Iron Ore Company of Canada (IOC) 100 Retty Street Sept-Îles, Quebec G4R 3E1 Contact: Mr. Keith Eldridge Telephone: (418) 968-7677 Facsimile: (418) 968-7108	Labrador City	O	1962, expanded 1973	100 000 specular hematite	Spirals and magnetic separators, Reichert cones, pelletizing, including flotation plant	Iron ore conc. and pellets, including Direct Reduction Pellets	Plant capacity of 17.0 Mt of conc., of which 12.5 Mt can be pelletized. Shipments to North America, Europe and the Far East.
Richmont Mines Inc. Nugget Pond Division P.O. Box 580 Baie Verte, Newfoundland A0K 1B0 Contact: Mr. J. Steven McAlpine Telephone: (709) 661-5162 Facsimile: (709) 661-5154	Nugget Pond mine Hammerdown gold deposit (under development)	U	April 1997	360	C.I.P.	Gold, silver Gold, silver	Underground mechanized mine. Reserve grade is 9 g/t. Reserve grade is 16 g/t at the underground mechanized mine. Plan to combine ores from both Nugget Pond and Hammerdown.
Royesfield Resources Ltd. 111 Saint George St., Suite 200 Moncton, New Brunswick E1C 1T7 Contact: Mr. James Gibson Telephone: (506) 857-8636 Facsimile: (506) 857-9211	Beaver Brook mine and plant in central Newfound-land, 40 km SW of Glenwood	U,P	1997	450	Flotation	Stibnite (antimony) concentrate	The mine and plant have not officially started. Some processing was done to commission the mill. The mine and mill are presently on care and maintenance.

NOVA SCOTIA

C2C Mining Corporation Bay 8 3716 - 56 Avenue, SE Calgary, Alberta T2C 2B5 Contact: Mr. LuVerne Hogg Contact: Mr. Dave Koop Telephone: (403) 264-5352 Facsimile: (403) 264-5365 E-mail: c2c@ezpc.st.com Web site: www.c2cminingcorp.com	North Mountain		2001 (estimated)	50	Crushing, magnetic separation, heat treating, sizing, packaging	Zeolite	Has commenced environmental approval process for mining.

NEW BRUNSWICK

Apocan Inc. 550 Route 635 Lake George, New Brunswick E6K 3N6 Contact: Mr. Wayne Marshall Telephone: (506) 366-2885 Facsimile: (506) 366-2008	40 km SW of Fredericton, near Lake George	U	July 1996	500 short tons/day		Antimony	The Lake George antimony mine has been out of production for a period of three and a half years due to low metal prices. In the fall of 1997, the mine was placed under care and maintenance in hope of keeping the site available for a prompt start-up in the event of an antimony price increase. On May 1, 1998, all underground equipment was taken to the surface and the dewatering pumps were turned off and removed. The mine is currently flooded.
CanZinco Ltd. P.O. Box 26 Bathurst, New Brunswick E2A 3Z1 Contact: Mr. John Martin Telephone: (506) 546-1999 Facsimile: (506) 548-1100	Caribou mine/mill, 50 km W of Bathurst	U,M	July 1997	3 000	Semi-autogenous grinding, flotation	Lead conc., zinc conc., copper conc.	Operations placed on care and maintenance in August 1998.
	Restigouche mine	O	July 1997			Lead conc., zinc conc., copper conc.	Operations placed on care and maintenance in August 1998.
Noranda Inc. Brunswick Mine P.O. Box 3000 Bathurst, New Brunswick E2A 3Z8 Contact: Mr. Chris Larsen Telephone: (506) 547-6112 Facsimile: (506) 547-6191	No. 12, Bathurst, Gloucester County	U	1964	9 400	Flotation	Zinc conc., lead conc., copper conc., bulk conc., silver	Zinc conc. is shipped to N.V. Union Minière S.A., Belgium; Canadian Electrolytic Zinc Limited, Valleyfield; and others. Lead conc. is shipped to the company's smelter at Belledune; copper conc. is shipped to Noranda Inc. (Mines Gaspé Division) at Murdochville, Quebec.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NEW BRUNSWICK (cont'd)							
Noranda Inc. Heath Steele Division P.O. Box 400 Newcastle, New Brunswick E1V 3M5 Contact: Mr. Glen Crowther Telephone: (506) 547-6013	55 km NW of Newcastle, Northumberland County	U,O	1957, expanded 1975	.. ..		Copper conc., lead conc., zinc conc., bulk lead-zinc conc.	Resumed operations in July 1989 following a five-year closure. Also processing ore from the adjacent Stratmat ore zone. Mine closed in mid-October 1999. Mill closed at the end of October 1999.
QUEBEC							
Agnico-Eagle Mines Limited LaRonde Division Highway 395, Préissac P.O. Box 400 Cadillac, Quebec J0Y 1C0 Contact: Mr. Jean Robitaille Telephone: (819) 759-3644 Facsimile: (819) 759-3641	LaRonde mine, Cadillac Twp.	U	1988	5 000	Flotation, leaching, gravity concentration	Gold, silver, copper conc., zinc conc.	Capacity of 5000 t/d started in October 2000.
Aur Resources Inc. Aurbel Division P.O. Box 7000 Val-d'Or, Quebec J9P 5K3 Telephone: (819) 825-5125 Facsimile: (819) 825-0953	Aurbel mill, Bourlamaque Twp.	M	1981	1 400	Flotation, cyanidation	Gold bullion	Gold mill operates as custom mill following closure of the Dumont and Ferderber mines in 1994. The mill was put on standby in 1998.

Aur Resources Inc. Louvicourt Division 5999 - 3rd Avenue East P.O. Box 2117 Val-d'Or, Quebec J9P 6V2 Contact: Mr. Sylvain Duchesne Contact: Mr. Louis Racine Telephone: (819) 736-3551 Facsimile: (819) 736-7221	Louvicourt mine, Louvicourt Twp.	U	1994	4 000	Flotation	Copper, zinc, gold, silver	
Aurizon Mines Ltd. Casa Berardi Division P.O. Box 487 Val-d'Or, Quebec J9P 4P5 Contact: Mr. Ghislain Fournier Telephone: (819) 874-4511, ext. 223 Facsimile: (819) 874-3391	Casa Berardi East and West mines, Casa Berardi Twp.	U	1988, stopped since May 1997	2 200	Cyanidation, C.I.L., Knelson concentrating table	Gold	On care and maintenance since 1997.
Barrick Gold Corporation Suite 2700, Royal Bank Plaza 200 Bay Street P.O. Box 119 Toronto, Ontario M5J 2J3 Telephone: (416) 861-9911 Facsimile: (416) 861-2492	Bousquet complex, Bousquet Twp.		#2 mine 1990	• •	Gravity, flotation, cyanidation	Copper conc., gold and silver bullion	
	East Malartic mill, Fournière Twp., Malartic	M	1988	3 000	Gravity, flotation, cyanidation	Copper conc., gold precipitate, gold bullion	Barrick Gold corporation acquired Lac Minerals Ltd. in 1994. In early 1995, the mill's capacity was increased to 3000 t/d.
Billiton Metals Canada Inc. Les Mines Selbaie Villebois, Quebec J0Z 3V0 Contact: Mr. Gérard Bégin, General Manager Telephone: (819) 756-2491, ext. 217 Facsimile: (819) 756-2684	Les Mines Selbaie, Brouillan Twp.	O	1981, expanded Oct. 1986	10 000	Flotation	Copper conc. and zinc conc. containing gold and silver	Copper conc. is shipped to Noranda Metallurgy Inc. Zinc conc. is shipped to Canadian and international markets.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
Breakwater Resources Ltd. Suite 2000 95 Wellington Street West Toronto, Ontario M5J 2N7 Telephone: (416) 363-4798 Facsimile: (416) 363-1315	Bouchard-Hébert mine, Dufresnoy Twp., 30 km N of Rouyn-Noranda	U	1995	2 800	Flotation	Zinc conc., copper conc.	
	Gonzague Langlois mine, 35 km NE of Lebel-sur-Quévillon	U	1996	2 000	Flotation	Zinc conc., copper conc.	
Cambior Inc. Suite 850 800 René-Lévesque Blvd. West Montréal, Quebec H3B 1X9 Contact: Mr. Robert LaVallière, Manager Telephone: (514) 878-1262 Facsimile: (514) 878-3324	Doyon mine, Cadillac, Bousquet Twp.	U	1980	3 800	Cyanidation, C.I.P.	Gold	Cambior inc. controls 100% of the Doyon mine since January 1998.
	Mouska mine, Cadillac, Bousquet Twp.	U	1989	300	Cyanidation	Gold	Since the company acquired 50% of the Doyon mine in January 1998, the operation of the Mouska mine has been combined with that of the Doyon mine. Ore from the Mouska mine is processed at the Doyon mine.
	Niobec mine, 14 km NW of Chicoutimi		1976	2 200 1 800	Flotation, conversion from niobium pentoxide to ferroniobium	Niobium pentoxide, ferroniobium	The Niobec mine is jointly owned by Teck Corporation, which operates the mine, and Cambior inc., which is responsible for the marketing of the ferroniobium.
	Sleeping Giant mine, 80 km N of Amos	U	1993	900	Cyanidation	Gold	Cambior manages the operation and shares ownership equally with Aurizon Mines Ltd.
	Yvan Vézina mill, Rouyn-Noranda	M	1982	1 100	Cyanidation, C.I.P.	Gold, silver	The plant is now closed.

Cliffs Mining Company Wabush Mines P.O. Box 878 Sept-Îles, Quebec G4R 4L4 Contact: Mr. Stephen Fontanals Telephone: (418) 964-3006 Facsimile: (418) 962-0209	Pelletizing plant, Pointe-Noire	P	1965	16 900 pellets	Pelletize specular hematite-magnetite iron ore	Iron ore pellets	Conc. from Wabush Mines at the Scully mine in Labrador; iron ore pellets are shipped to steel plants in North America and Europe through participating companies: Stelco Inc., Dofasco Inc., Acme Steel Company, and Cleveland-Cliffs Inc.
Inmet Mining Corporation Suite 3400, Aetna Tower 79 Wellington Street West P.O. Box 19, Station Toronto-Dom. Toronto, Ontario M5K 1A1 Contact: Mr. Bernard Boily Telephone: (819) 764-6666, ext. 224 Facsimile: (819) 764-6404	Norbec mill, Duprat Twp.	M	1963	1 350	Flotation	Copper conc.	Plant to be dismantled. Reclamation is in progress.
	Troilus mine, mill and concentrator, 175 km N of Chibougamau	O,M,C	January 1, 1997	15 000	Gravity, flotation	Gold, copper conc.	
ITEC-MINÉRAL INC. 310 Industriel Blvd. Saint-Eustache, Quebec J7R 5R4 Contact: Ms. Josée Lajeunesse Telephone: (450) 491-2100 Facsimile: (450) 491-0100	Norebec-Manitou, Val-d'Or		1980	6 000 900	Preconcentration, cyanidation	Precious metals, base metals, industrial minerals	Mine tailings recycling to neutralize acid drainage and recover metals.
McWatters Mining Inc. Val-d'Or Operation Kiena Gold Mines Division 300 - 3rd Avenue East Val-d'Or, Quebec J9P 4N8 Contact: Mr. Roger Toussaint Telephone: (819) 738-4031, ext. 5330 Facsimile: (819) 738-5910	Dubuisson	U	1984	1 700	Crushing, semi-autogenous grinding, cyanidation, C.I.P. filtration	Gold bullion	

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
McWatters Mining Inc. Val-d'Or Operation Sigma Mines Division 300 - 3rd Avenue East Val-d'Or, Quebec J9P 4N8 Contact: Mr. Marc Lafontaine Telephone: (819) 825-4182, ext. 1213 Facsimile: (819) 874-1994 E-mail: lafontaine.marc@mcwatters.com	Bourlamaque Twp., Val-d'Or	U	1937	3 000	Cyanidation, C.I.P.	Gold bullion	Gold bullion bars shipped to Johnson Matthey Limited at Brampton, Ontario, for refining and then sold on free world markets.
Meston Resources Inc. P.O. Box 400 Chibougamau, Quebec G8P 2X8 Contact: Mr. Raymond Fournier Telephone: (418) 745-2537 Facsimile: (418) 748-3238	Joe Mann mine, La Dauversière, Chibougamau	U	1952 mine	••	••	Gold, copper, silver conc.; gold and silver bullion	Presently, 1200 t/d are trucked 65 km to the Meston mill in Obalski Twp. Copper conc. is shipped to Noranda Inc. Gold bullion is shipped to the Royal Canadian Mint in Ottawa.
MSV Resources Inc. Suite 1405 1155 University Street Montréal, Quebec H3B 3A7 Contact: Mr. Alain Blais Telephone: (418) 748-7691 Facsimile: (418) 748-7696	Copper Rand mine, McKenzie Twp., Chibougamau	U,M	1959	3 000	Flotation, gravity	Copper-gold-silver conc., gold bullion	Copper Rand mine has a mill at the mine site. Shaft deepening is under way.
	Corner Bay, Lemoine Twp.	U	1997	••	••	Copper	Project on hold.
	Eastmain mine		1993	••	••	Gold ore	Project on hold.
	Portage mine, Roy Twp.	U	1959	••	••	Gold-copper-silver ore	Closed in 1997. Ore exhausted.

Noranda Inc. Home Smelter P.O. Box 4000 Rouyn-Noranda, Quebec J9X 5B6 Contact: Mr. Claude Bélanger Telephone: (819) 762-7764, ext. 2008 Facsimile: (819) 762-1976	Gallen, Rouyn-Noranda	U	1997	28 000 t/y zinc conc.		Zinc, silver, gold	Mine re-opened in October 1997 and was expected to operate for three years. Presently closed.
Noranda Inc. Matagami Division Matagami, Quebec J0Y 2A0 Telephone: (819) 739-3511	Bell Allard mine, Matagami	U		2 000	••	Zinc, copper	Bell Allard mine is under construction. Production is expected to begin in 1998.
	Isle Dieu mine, Matagami	U	1963	••	••	Zinc conc., copper conc.	Matagami concentrator treats ore from the mine. Copper conc. is shipped to the Home smelter, Rouyn-Noranda; zinc conc. is shipped to Canadian Electrolytic Zinc Limited in Valleyfield, Quebec. Isle Dieu mine closed in November 1997.
	Norita mine	U	1992	••	••	Zinc-copper ore	Mine closed in November 1997 due to ore depletion.
Noranda Inc. Mines Gaspé Division 53, chemin de la mine Murdochville, Quebec G0E 1W0	E Zone orebody, Murdochville	U	1955, expanded 1967	3 000	Flotation	Copper conc.	Mine re-opened in February 1989. Conc. is treated at its own smelter. The operations stopped indefinitely on October 15, 1999, at the E Zone orebody.
Contact: Mr. Serge St-Pierre Telephone: (418) 784-4201 Facsimile: (418) 784-2503	Orebody from Mount Copper	O	1967	1 500	Flotation	Copper conc.	Conc. is treated at its own smelter. Part of the backfill material is used for hydraulic mine filling. Mining ceased indefinitely on April 2, 1999, at Mount Copper open pit.
Norebec-Manitou Inc. Concentrator P.O. Box 1566 Val-d'Or, Quebec J9P 5Y8 Telephone: (819) 825-2788 Facsimile: (819) 825-9142	Val-d'Or	C	1993	600	Flotation cyanidation	Gold, silver	Closed since January 1995. Re-opening is planned for 2000.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
QIT Fer et Titane Inc. 1625 Marie-Victorin Highway Tracy, Quebec J3R 1M6	Mine at Lac Tio, wharf at Havre-Saint-Pierre	O	1950	3 500 000 t/y of ilmenite ore	Spirals and magnetic separators, roasting, electric smelting, oxygen converter and continuous casting; approximately 60% of co-produced liquid pig iron is currently converted to high-purity steel billets and powder; leaching of titania slags; acid regeneration	Ilmenite conc., pig iron, titania slag, high-purity steel billets, iron powders, concentrated slag	Ilmenite ore is mined and partially crushed at Lac Tio; the plant at Tracy beneficiates ore and extracts iron and titania slag products by reduction.
Contact: Mr. Terry Bowles Telephone: (450) 746-3071 Facsimile: (450) 746-1101	Mill ore dressing and treatment plant, reduction plant	P	1951	900 000 t/y of pig iron, 1 100 000 t/y of titania slag			
	Steel mill	M	1986	440 000 t/y of high-purity steel billets			
	Titanium slag concentrator	C	1997	200 000 t/y of concentrated slag			
Quebec Cartier Mining Company Suite 1400 1801 McGill College Avenue Montréal, Quebec H3A 2N4	Mount Wright	O	1975	50 000 conc., 125 000 ore	Autogenous grinding with spiral separation	Specular hematite conc.	Iron ore conc. is shipped to the pelletizing plant or to world markets.
	Port-Cartier		1977	25 000 pellets	Pelletizing plant	Hematite pellets	Pellets are shipped to world markets.
Contact: Mr. François Pelletier Telephone: (514) 285-1464, ext. 204 Facsimile: (514) 285-1978							

Richmont Mines Inc. 110 Principale Avenue Rouyn-Noranda, Quebec J9X 4P2 Contact: Mr. Martin Rivard Telephone: (819) 797-2465 Facsimile: (819) 797-0166	Beaufor gold mine, Pascalis Twp.	U	1996	820 at 5 days per week		Gold	Commercial production began in January 1996. Minerals are treated at Camflo Mill Inc.
	Camflo mill, Malartic and Fournière Twps.	M	1969	1 300	Cyanidation	Gold bullion	Gold bullion bars are shipped to the Royal Canadian Mint in Ottawa, Ontario, for refining.
	Francoeur mine, Beauchastel Twp.	U	1991	750	**	Gold	Production began in October 1991. The ore is processed at the Camflo mill in Malartic.
Richmont Mines Inc. Nugget Pond Division P.O. Box 580 Baie Verte, Newfoundland A0K 1B0 Contact: Mr. J. Steven McAlpine Telephone: (709) 661-5162 Facsimile: (709) 661-5154	Nugget Pond mine	U	April 1997	360	C.I.P.	Gold, silver	Underground mechanized mine. Reserve grade is 9 g/t.
	Hammerdown gold deposit (under development)	U				Gold, silver	Reserve grade is 16 g/t. Underground mechanized mine. Plan to combine ores from both Nugget Pond and Hammerdown.
Société Minière Raglan du Québec Ltée 120, avenue de l'aéroport Rouyn-Noranda, Quebec J9X 5B7 Telephone: (819) 762-7800 Facsimile: (819) 797-0531	Raglan mine, 65 km south of the northern tip of Ungava Peninsula	O	1997	2 700		Nickel, copper, cobalt, platinum group metals	Commercial production began in April 1998. Project expansions to continue in 2001.
Teck Corporation 3400 Colombium Street Saint-Honoré, Quebec G0V 1L0	Niobec mine, Saint-Honoré	U	1976	2 475	Flotation	Pyrochlore conc.	All conc. (60% niobium pentoxide) is transformed into ferroniobium. Ferniobium is sold to steel plants that produce high-resistance steel.
Contact: Mr. Eddy Dénommé Telephone: (418) 673-4694 Facsimile: (418) 673-3179	Niobec mine, Saint-Honoré de Chicoutimi		1994	3 200	Pyrometallurgy	Ferroniobium	The Niobec mine is jointly owned by Teck Corporation, which operates the mine, and Cambior inc., which is responsible for the marketing of the ferroniobium.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
Western Quebec Mines Inc. P.O. Box 268 Val-d'Or, Quebec J9P 4P3 Contact: Mr. Claude Perreault Telephone: (819) 874-6511 Facsimile: (819) 874-8131	Joubi mine, Val-d'Or area	U	1989 mine	**	**	Gold	Processing off site by Camflo Mill Inc. Closed October 30, 1999.
ONTARIO							
Barrick Gold Corporation Suite 2700, Royal Bank Plaza 200 Bay Street P.O. Box 119 Toronto, Ontario M5J 2J3 Telephone: (416) 861-9911 Facsimile: (416) 861-2492	Holt-McDermott mine, Harker/ Holloway Twp.	U	1988	2 500	Cyanidation, C.I.L.	Gold, silver	
Battle Mountain Canada Ltd. P.O. Box 40 Marathon, Ontario P0T 2E0 Contact: Mr. Jim Paynter Telephone: (807) 238-1121 Facsimile: (807) 238-1013	Golden Giant mine, Hemlo	U	1985	3 000	C.I.P., cyanidation	Gold	
Battle Mountain Canada Ltd. P.O. Box 279 Matheson, Ontario P0K 1N0 Contact: Mr. Claude Bégin, Manager Telephone: (705) 567-4862, ext. 201 Facsimile: (705) 567-4863	Holloway mine, 60 km E of Matheson	U	October 1996	1 600 (500 000 t/y, 6 days/week)		Gold	

Claude Resources Inc. 200 - 224 4th Avenue South Saskatoon, Saskatchewan S7K 5M5 Contact: Mr. Neil McMillan, President Telephone: (306) 668-7505 Facsimile: (306) 668-7500	Madsen mine, Red Lake	U	1938-76 (original mine)	600	Cyanidation, C.I.P.	Gold	Extensive diamond drill program for the latter part of 1999 and the year 2000.
Exall Resources Limited P.O. Box 605 Matheson, Ontario P0K 1N0 Telephone: (705) 273-2344 Facsimile: (705) 273-2373	Glimmer mine, Heslop and Beatty Twps.	U	1996	600		Gold	Custom milling at the Macassa mine near Kirkland Lake, Ontario, as of October 15, 1999.
Falconbridge Limited Kidd Metallurgical Division P.O. Box 2002 Timmins, Ontario P4N 7K1 Contact: Mr. Claude Ferron Telephone: (705) 235-8121 ext. 7549 Facsimile: (705) 235-7318	Kidd Creek mine, Kidd Twp.	O,U	1966	10 000	Flotation	Zinc conc., copper conc.	Copper conc. is processed at company smelter and refinery; also sold to others. Zinc conc. is processed at company refinery and surplus is sold to others.
Falconbridge Limited Sudbury Division Falconbridge, Ontario P0M 1S0 Contact: Mr. A.G. Hayward Telephone: (705) 966-3411 Facsimile: (705) 966-6544	Fraser mine, Strathcona mine, Levack Twp.	U	••	••		Nickel-copper ore	Ore from company mines is beneficiated in the Strathcona mill to produce nickel-copper conc.; the conc. is smelted to nickel-copper matte and shipped to Falconbridge's refinery in Kristiansand, Norway. Metals recovered include nickel, copper, gold, silver, platinum, palladium, iridium, rhodium, ruthenium and cobalt.
	Lockerby mine, Denison Twp.	U	••	••		Nickel-copper ore	Mining was suspended in June 1994 due to high operating costs and low nickel prices. Re-opened in December 1995.
	Onaping/ Craig mine, Levack Twp.	U	••	••		Nickel-copper ore	

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
Falconbridge Limited (cont'd)	Strathcona mill, Levack Twp.		1968	10 000	Flotation	Nickel-copper conc.	
	Thayer Lindsley mine	M	**	**		Nickel-copper ore	
Goldcorp Inc. Suite 2700 145 King Street West Toronto, Ontario M5H 1J8 Contact: Mr. R.R. McEwen Telephone: (416) 865-0326 Facsimile: (416) 361-5741	Red Lake mine, Balmer Twp.	U	original 1948, new plant 2000	600	Gravity, cyanidation, flotation	Gold bullion	Gold bullion bars are shipped to Johnson Matthey Limited at Brampton, Ontario, for refining.
Inco Limited Ontario Division (Mills) Sudbury, Ontario P0M 1N0 Contact: Mr. Bob Leblanc Telephone: (705) 682-5689 Facsimile: (705) 682-5409	Clarabelle mill, Sudbury Twp.	M	1971	36 300	Magnetic separation, flotation	Nickel-copper and pyrrhotite conc.	Beneficiates ores mined in the Sudbury area. Bulk conc. is pumped to the Copper Cliff mill for dewatering.
	Copper Cliff mill, Sudbury Twp.	M	1930	**	Dewatering	Nickel-copper bulk conc.	Bulk conc. is pyrometallurgically reduced to produce impure copper and nickel metals.
	Shebandowan mill, Hagey Twp.	M	1972	**	Flotation	Nickel-copper conc.	Shut down in May 1998.
	Coleman mine, Levack Twp.	U	**	1 400	**	Nickel-copper ore	
	Copper Cliff North mine, Sudbury Twp.	U	**	2 800	**	Nickel-copper ore	
	Copper Cliff South mine, Sudbury Twp.	U	**	3 000	**	Nickel-copper ore	
	Crean Hill mine, Denison Twp.	U	**	1 300	**	Nickel-copper ore	

	Creighton mine, Creighton Twp.	U	••	4 000	••	Nickel-copper ore	
	Frood-Stobie mine, McKim and Blezard Twps.	U	••	8 300	••	Nickel-copper ore	
	Garson mine, Garson Twp.	U	••	2 000	••	Nickel-copper ore	
	Gertrude mine, Creighton Twp.	O	1997	••	••	Nickel-copper ore	Back in operation.
	Little Stobie mine, Blezard Twp.	U	••	nil	••	Nickel-copper ore	Closed in 1999.
	McCreedy East mine, Levack Twp.	U	1996	2 800	••	Nickel-copper ore	
	McCreedy West mine, Levack Twp.	U	••	nil	••	Nickel-copper ore	Closed in 1999.
	Shebandowan mine, Hagey Twp.	U	••	••	••	Nickel-copper ore	Ceased production in April 1998.
	WD 16, Wisner Twp.	O	••	••	••	Nickel-copper ore	On temporary suspension.
	Whistle mine, Norman Twp.	O	1994	••	••	Nickel-copper ore	Ceased production in October 1997.
Inmet Mining Corporation Suite 3400, Aetna Tower 79 Wellington Street West P.O. Box 19, Station Toronto-Dom. Toronto, Ontario M5K 1A1 Contact: Mr. Bernard Boily Telephone: (819) 764-6666, ext. 224 Facsimile: (819) 764-6404	Winston Lake mine/mill, 20 km NW of Schreiber	U,M	1988	1 000	Flotation	Zinc conc., copper conc.	Mine closed in the first quarter of 1999. Reclamation in progress.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
Kinross Gold Corporation P.O. Bag 1000 Schumacher, Ontario P0N 1G0 Contact: Mr. Rod Cooper Telephone: (705) 235-6326 Facsimile: (705) 235-6302	Bell Creek mine/mill, Timmins	U,M	1987	1 400	C.I.P.	Gold	Mill expanded in 1996 to 1400 t/d.
	Hoyle Pond mine	U	••	••	••	Gold ore	136 709 troy oz of gold were produced in 1999. Gold ore is processed at the Bell Creek mill.
	Macassa mine, Teck Twp.	U	1933	600	Cyanidation, C.I.P.	Gold, silver	38 689 troy oz of gold were produced in 1999. Operations suspended in June 1999.
	Macassa mill	M		1 400	Cyanidation, C.I.P.	Gold, silver	Custom milling, Exall-Glimmer joint venture, at 800 t/d.
	Nighthawk mine		1995-99	800 t/d		Gold	Suspended operations in August 1999. Produced 14 246 troy oz in 1999.
	Pamour mine		1936-99	1 000 t/d		Gold	Suspended operations in August 1999. Produced 39 720 troy oz in 1999.
	Pamour #3 pit		1983-99	2 000 t/d		Gold	Suspended operations in September 1999. Produced 19 668 troy oz in 1999.
	Pamour mill	M	1936-99	3 800	Cyanidation, Merrill-Crowe	Gold	Suspended operations in September 1999. Produced 58 781 troy oz in 1999, including mill clean-up.
Lac des Îles Mines Ltd. P.O. Box 3386 Thunder Bay, Ontario P7B 5J9 Contact: Mr. Keith Minty Telephone: (807) 448-2012 Facsimile: (807) 448-2001	Lac des Îles mine, 90 km N of Thunder Bay	O	April 2001	15 000	Flotation	Palladium conc., platinum, gold, copper, nickel, cobalt	Currently operating 2700-t/d mill. Mill with 15 000-t/d capacity is under construction with start-up scheduled for April 2001.

Patricia Mining Corp. Suite 405 100 Adelaide Street West Toronto, Ontario M5H 1S3 Contact: Mr. Richard Sutcliffe Telephone: (416) 214-4900 Facsimile: (416) 864-0620	Island Gold project (former Goudreau Kremzar mine)	U	1988	600	Cyanidation, C.I.P. extraction	Gold	Patricia Mines Inc. purchased the Island Gold project from Canada Tungsten Inc. on April 1, 1996. Placed on care and maintenance in October 1990. Additional surface exploration and diamond drilling was carried out in 1998 and 2000. Name changed on September 13, 1999, from Patricia Mines Inc. Stockholders received one new share for five old shares.
Placer Dome North America 600 - 1055 Dunsmuir Street P.O. Box 49335 Station Bentall Centre Vancouver, British Columbia V7X 1L3	Campbell mine, Balmertown, Red Lake Twp.	U	1949	1 455	Crushing, grinding, jigging, tabling, flotation, pressure oxidation, cyanidation, C.I.P., precipitation	Gold bullion	$35 million flotation circuit completed in June 1997. $70 million depth development project started in 1995. Completion in 1999.
Contact: Mr. Jacques Perron (Campbell mine) Telephone: (807) 735-2075 Facsimile: (807) 735-2765	Detour Lake mine, 200 km N of Cochrane		1983	3 500	Crushing, grinding, leaching, C.I.P., stripping, electrowinning	Gold dore bars	Mine closed in July 1999 due to ore reserves exhaustion.
Contact: Mr. Keith Boyle (Detour Lake mine) Telephone: (705) 245-3211 Facsimile: (705) 245-3229	Dome mine, Tisdale Twp., South Porcupine	O,U	1910	11 800	Crushing, grinding, leaching, C.I.P., stripping, electrowinning	Gold bullion	Mill capacity increased in 1995; $150 million expansion, including open pit, mill, shops and office complex, completed in 1995.
Contact: Mr. Keith Boyle (Dome mine) Telephone: (705) 235-6540 Facsimile: (705) 235-6551 Contact: Mr. Sam Coetzer (Musselwhite mine) Telephone: (807) 532-2160, ext. 2235 Facsimile: (807) 532-2021	Musselwhite mine, 200 km N of Pickle Lake	O,U	April 1997	3 300	C.I.P.	Gold bullion	Highly mechanized mine in remote location producing 3300 t/d at an average grade of 5.3 g/t.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
River Gold Mines Ltd. 8 King St. East, Suite 1305 Toronto, Ontario M5C 1B5	Eagle River mine, Wawa	U	November 1995	1 000	Cyanidation	Gold	In the first quarter of 2000, a 75% interest in the Magnacon property was acquired for $0.5 million. It adjoins the River Gold mill.
(Main office) Telephone: (416) 360-3743 Facsimile: (416) 360-7620	Edwards mine, Wawa	U	1997	50 000 t/y		Gold	Ships ore to Eagle River mill. Edwards mine is 100% owned subject to an NSR royalty.
(Mine) Telephone: (705) 856-2721 Facsimile: (705) 856-2986							
St. Andrew Goldfields Ltd. 166 Pearl Street Toronto, Ontario M5H 1L3	Hislop, 30 km E of Stock property, Hislop Twp.	O	July 1999	..	..	Gold	Mining restarted in July 1999.
Contact: Mr. Julian Kemp Telephone: (416) 597-0969 Facsimile: (416) 597-1776	Stock mill, E of Timmins, Stock Twp.	M	October 1989	1 300	Cyanidation	Gold	Stock mill does custom milling and processing of ore from Hislop open-pit mine, Stock underground mine and third-party ore.
	Stock mine, E of Timmins, Stock Twp.	U	March 2000			Gold	Mining restarted in March 2000.
Teck-Corona Operating Corporation Postal Bag 11 Marathon, Ontario P0T 2E0	David Bell mine, Hemlo	U	1985	1 250	C.I.P.	Gold	Ore is processed at the Williams Operating Corporation mill, located 2 km west of the David Bell mine site, as of June 15, 1999.
Contact: Mr. Peter Rowlandson Telephone: (807) 238-1717 Facsimile: (807) 238-1359							

Timminco Limited 10 Bay Street, 9th Floor Toronto, Ontario M5J 2R8 Telephone: (613) 432-3621	Haley Station	O	1942	7 500 t/y magnesium, 900 t/y calcium	Calcining, reduction, refining, melting, casting, extruding	Magnesium, calcium, strontium	Dolomite is mined in an open pit and calcined in a rotary kiln. Magnesium is thermally reduced from calcined dolomite using ferrosilicon as a reducing agent. Reaction is carried out in retorts evacuated to very low pressure. Retorts are heated by natural gas. Condensate is melted and cast into ingots. The magnesium produced is very pure, nominally 99.95%. Calcium and strontium are produced by a similar process from purchased raw material. Calcium production is not currently active; retort furnaces have been switched to magnesium production.
	Westmeath		1987	500 t/y strontium			
Williams Operating Corporation P.O. Box 500 Marathon, Ontario P0T 2E0 Contact: Mr. Brian LeBlanc Telephone: (807) 238-1100 Facsimile: (807) 238-1499	Williams mine, Hemlo, approximately 35 km E of Marathon		December 1985	10 000	Cyanidation, C.I.P., gravity concentration	Gold bullion	Combined milling operations for Williams and David Bell mines. Small amount of silver by-product. Gold bullion dore bars are shipped to the Royal Canadian Mint in Ottawa for refining.

MANITOBA

Black Hawk Mining Inc. P.O. Box 2000 Lynn Lake, Manitoba R0B 0W0 Contact: Mr. James Armstrong Telephone: (204) 356-2461, ext. 30 Facsimile: (204) 356-8372	Keystone Gold mine, Farley Lake	O	1996			Gold	Production from the Keystone open-pit mine began in June 1996. The operation was shut down in April or May 2000 due to final decommissioning and water treatment.
	Mill, Lynn Lake	M	1986	1 450	C.I.P.	Gold	
Harmony Gold Mining Company Limited Bissett Gold Mine P.O. Box 1000 Bissett, Manitoba R0E 0J0 Contact: Mr. Dale Ginn Telephone: (204) 277-5411 Facsimile: (204) 277-5552	Bissett gold mine, Bissett	U	July 1998	1 000	Gravity, flotation, C.I.P.	Gold	Mine currently producing 1000 t/d; will be expanded to 1250 t/d.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
MANITOBA (cont'd)							
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9	777 mine, Flin Flon		2003	3 700		Copper, zinc, gold, silver ore	Ore will be processed in the Flin Flon concentrator.
	Callinan mine	U	1990	1 550	Flotation	Copper, zinc, gold, silver ore	Ore is treated at the Flin Flon concentrator.
Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Chisel North mine, Snow Lake		2000	600		Zinc	Ore is processed at the Snow Lake concentrator. Production will increase to 600 t/d in mid-2001.
	Flin Flon mill	M	1931	5 500	Flotation	Copper conc., zinc conc.	Expansion and modernization will be completed in the second quarter of 2001.
	Photo Lake mine, Snow Lake	U	1995	..	..	Copper, zinc, gold, silver ore	Resources depleted.
	Ruttan mine/mill	U,M	1973	5 350	Flotation	Copper conc., zinc conc.	Ruttan ore is treated at the Ruttan concentrator.
	Snow Lake mill, Snow Lake	M	1979	3 600	Flotation	Copper conc., zinc conc.	The Snow Lake concentrator is processing Chisel North ore.
	Trout Lake mine	U	1984	2 500	Flotation	Copper, zinc, gold, silver ore	Trout Lake mine and Callinan mine ores are treated at the Flin Flon concentrator.
Inco Limited Manitoba Division Thompson, Manitoba R8N 1P3	Birchtree mine	U	1964	2 300	Underground mining	Nickel-copper ore	Ships ore to the Thompson mill.
	Thompson mill	M	1960	12 000	Flotation	Nickel conc., copper conc.	The Thompson mill treats ore from all Thompson area mines.
Contact: Mr. Dan McSweeney Telephone: (204) 778-2326 Facsimile: (204) 778-2975	Thompson mine	U	1960	7 500	Underground mining	Nickel-copper ore	Ore is treated at the Thompson mill.

Pioneer Metals Corporation 1220 - 609 Granville Street P.O. Box 10364 LCD Pacific Centre Vancouver, British Columbia V7Y 1G5 Contact: Mr. Warren Stanyer Telephone: (604) 669-3363 Facsimile: (604) 669-1240	Puffy Lake mine, Sherridon		1987	1 000	Flotation cyanidation	Gold	Operations were suspended in April 1989. Was in process of reactivation during 1994/96. Start-up has been postponed indefinitely.
Tantalum Mining Corporation of Canada Limited (TANCO) P.O. Box 2000 Lac du Bonnet, Manitoba R0E 1A0 Contact: Mr. William Ferguson Telephone: (204) 884-2400 Facsimile: (204) 884-2211	Bernic Lake	U	1969	700	Gravity	Tantalum conc.	Tantalum conc. is shipped to the parent company in the United States for the production of tantalum metal.
			1984	300	Gravity, flotation	Spodumene conc., amblygonite conc.	Spodumene is shipped to worldwide markets for use in glass and ceramic applications.
			1997	40	Dry grinding, leach	Cesium formate (oil well drilling liquid)	
TVX Gold Inc. New Britannia Mine P.O. Box 451 Snow Lake, Manitoba R0B 1M0 Contact: Mr. Brian Randall Telephone: (204) 358-2927 Facsimile: (204) 358-2030	New Britannia mine, 200 km E of Flin Flon	U	1995	2 200	Cyanidation	Gold	Production started in August 1995. Owned by TVX Gold Inc. (50%) and High River Gold Mines Ltd. (50%). New Britannia was formerly the Nor-Acme mine, which produced between 1949 and 1958.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
SASKATCHEWAN							
Cameco Corporation 2121 - 11th Street West Saskatoon, Saskatchewan S7M 1J3 Contact: Mr. Bill Wakabayashi Telephone: (306) 956-6558 Facsimile: (306) 956-6631	Key Lake		1983	800	Acid leach, solvent extraction, ammonia precipitation and drying	Yellowcake	Key Lake Joint Venture (Cameco, 83%; Cogema, 17%). Capacity is 18 million lb/y of tri-uranium octoxide.
	Rabbit Lake		1975	2 000	Acid leach, solvent extraction, peroxide precipitation and drying	Yellowcake	Cameco, 100%. Capacity is 12 million lb/y of tri-uranium octoxide.
	McArthur River		2000	150	Raise bore ore extraction, semi-autogenous milling, slurry pumping and transportation	Low-grade ore slurry waste rock	McArthur River Joint Venture, (Cameco Corp., 70%; Cogema, 30%).
Claude Resources Inc. 200-224 4th Avenue South Saskatoon, Saskatchewan S7K 5M5 Contact: Mr. Neil McMillan, President Telephone: (306) 668-7505 Facsimile: (306) 668-7500	Seabee mine, 125 km NE of LaRonge		November 1991	700	Cyanidation, C.I.P.	Gold	60 200 oz of gold produced in 1998.
COGEMA Resources Inc. P.O. Box 9204 817 - 825 45th Street West Saskatoon, Saskatchewan S7K 3X5 Contact: Mr. Alun Richards Telephone: (306) 343-4637 Facsimile: (306) 653-1126	Cluff Lake	U	1980	6.5 t/d U (900 t/d of ore)	Acid leaching, solvent extraction	Uranium concentrate (ammonium diuranate)	COGEMA Resources Inc. operates the Cluff Lake project (100% COGEMA Resources Inc.). Uranium concentrates (greater than 70% uranium) are shipped to refinery plants in Canada, the United States, Britain or France for conversion. Cluff Lake mines ore from the Dominique-Janine underground mine. The ore is processed in a standard circuit using solvent extraction. Operations will be suspended in 2000 or 2001.

	McClean Lake	O	1999	7 t/d U (300 t/d of ore)	Acid leaching, solvent extraction	Uranium concentrate (calcined ammonium diuranate)	COGEMA Resources Inc. operates for McClean Lake Joint Venture (COGEMA Resources Inc., 70%; Denison Mines Limited, 22.5%; OURD (Canada) Co., Ltd., 7.5%). Construction began in March 1995. Production began in mid-1999. The JEB open pit has been mined and converted to a tailings management facility. Ore is being mined from the Sue open pit. Uranium concentrates (greater than 80% uranium) are shipped to refinery plants in Canada, the United States, Britain or France for conversion.
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Konuto Lake (Denare Beach), Creighton		1999	800		Copper, zinc, gold, silver	Ore is processed in the Flin Flon concentrator.
BRITISH COLUMBIA							
Boliden Westmin (Canada) Limited) Myra Falls Operations P.O. Box 8000 Campbell River, British Columbia V9W 5E2 Contact: Mr. Geoff Locke Telephone: (250) 287-9271, ext. 283 Facsimile: (250) 286-6171 E-mail: glocke@boliden-westmin.com	Myra Falls, Strathcona Provincial Park, Vancouver Island	U	1966, expanded 1985	4 000	Flotation	Zinc conc., copper conc., gold conc.	Copper conc. and gold conc. are shipped to Japan. Zinc conc. is shipped to South Korea and Japan.
Claimstaker Resources Ltd. 1440 - 1166 Alberni Street Vancouver, British Columbia V6E 3Z3 Telephone: (604) 684-6677 Facsimile: (604) 684-6678	Blackdome mine, Clinton		1996	200	Gravity and flotation recovery	Gold, silver	Closed April 30, 1999, due to the low gold price.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
BRITISH COLUMBIA (cont'd)							
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Sullivan mine, Kimberley	U	1922	8 400	Flotation, sink-float	Zinc conc., lead conc.	Conc. is shipped to the company's smelter at Trail; conc. contains some silver, antimony, cadmium, bismuth, tin, indium and copper.
Cusac Gold Mines Ltd. Suite 908 700 West Pender Street Vancouver, British Columbia V6C 1G8 Contact: Mr. David Brett Telephone: (604) 682-2421 Facsimile: (604) 682-7576	Table Mountain mine, Cassiar	U	1980	300	Gravity, flotation	Gold, silver	On care and maintenance.
Gibraltar Mines Limited (a subsidiary of Taseko Mines Limited) P.O. Box 130 McLeese Lake, British Columbia V0L 1P0 Contact: Mr. John Hutchings, Mine Manager Telephone: (250) 297-6211 ext. 354 Facsimile: (250) 297-6548	McLeese Lake	O	1972	36 300	Flotation	Copper conc., molybdenum conc.	Presently shut down. Tentative plans are to restart in 2000. Mining to commence in Stage III Pollyanna pit. Approximately 12 years of reserves remain. Additional zones to be explored in 2000.
Highland Valley Copper P.O. Box 1500 Logan Lake, British Columbia V0K 1W0 Contact: Mr. T.D. Marsten Telephone: (250) 523-3226 Facsimile: (250) 523-3290	Highland Valley	O	1986	136 000	Flotation	Copper conc., molybdenum conc.	

Homestake Canada Inc. P.O. Box 11115 1100 - 1055 West Georgia Street Vancouver, British Columbia V6E 3P3 Contact: Mr. Martin Wafforn Telephone: (604) 684-2345 Facsimile: (604) 684-9831	Eskay Creek mine	U	1995	300	Crushing only	Gold, silver	Ore is crushed to minus 2 inches at the site and shipped direct to smelters in Japan, Quebec and other areas.
	Eskay Creek plant	P	1998	250	Gravity, flotation circuit	Gold, silver	A 150-t/d gravity and flotation well was constructed in 1997 and started operating in 1998. Throughput was increased to 250 t/d in mid-2000. Gravity concentrate is shipped to a refinery and flotation concentrate is sold to a smelter.
	Nickel Plate mine, Hedley	O	1987	3 267	Cyanidation/ Merrill-Crowe circuit	Gold, silver	The Nickel Plate mine closed in 1996. It is presently in a reclamation phase.
	Snip mine, Stewart	U	1991	450	Gravity, flotation circuit	Gold, silver	The Snip mine was shut down on May 31, 1999, due to an exhaustion of ore reserves. The mine is presently in the reclamation phase.
Imperial Metals Corporation 420 - 355 Burrard Street Vancouver, British Columbia V6C 2G8 Contact: Mr. André Deepwell Telephone: (604) 669-8959 Facsimile: (604) 687-4030	Huckleberry, 80 km S of Houston	O	1997	21 000	Flotation	Copper conc., gold, silver, molybdenum conc.	Copper conc. containing gold and silver is being shipped to Japan.
Imperial Metals Corporation P.O. Box 12 Likely, British Columbia V0L 1N0 Telephone: (250) 790-2215 Facsimile: (250) 790-2268	Mount Polley mine, 90 km NE of Williams Lake	O	1997	20 000		Gold, copper	
Kinross Gold Corporation QR Mine P.O. Box 4700 Quesnel, British Columbia V2J 3J9 Contact: Mr. Brian Miller Telephone: (604) 522-3974 Facsimile: (250) 747-8319	QR mine, 70 km SE of Quesnel	O	1995	1 250	Gravity, cyanidation, C.I.P.	Gold	Started production in the spring of 1995. Shut down in May 1998. On care and maintenance.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
BRITISH COLUMBIA (cont'd)							
North American Metals Corp. 1500 -700 West Pender Street Vancouver, British Columbia V6C 1G8 Contact: Mr. Rino Mihoc Telephone: (250) 236-7110 Facsimile: (250) 236-7111	Golden Bear mine, Atlin Mining District	O	1990	5 000	Heap leach	Gold, silver	Mill operations were suspended in September 1994 pending development of additional underground reserves. Seasonal heap leach operation since 1997.
Northgate Exploration Limited Kemess Mine P.O. Box 3519 Smithers, British Columbia V0J 2N0 Contact: Ms. Patricia Maloney Telephone: (604) 881-8400, ext. 2201 Facsimile: (604) 881-8418	Kemess mine, north-central British Columbia	O	1998	49 000	••	Gold, copper	Royal Oak Ventures Inc. holds a 5% interest in this mine, which belongs to Northgate Exploration Limited. The Kemess mine was the property of Royal Oak Mines Inc. before Royal Oak was declared bankrupt in 1999.
Thompson Creek Mining Limited P.O. Box 4001 Fraser Lake, British Columbia V0J 1S0 Contact: Mr. Gord Coyle Telephone: (250) 699-6211, ext. 386 Facsimile: (250) 699-7775	Endako	O	1965	27 000	Flotation	Molybdenite conc., molybdic oxide	92% of molybdenite conc. is roasted to produce molybdic oxide for use in steel production; 8% of molybdenite is refined to lubricant grade for use in greases, oils and batteries. Surplus roasting capacity continues to be used for custom roasting.
YUKON							
United Keno Hill Mines Limited 350 Bay Street, 10th Floor Toronto, Ontario M5H 2S6 Contact: Mr. Stephen Powell Telephone: (416) 943-1500 Facsimile: (416) 943-1600	Elsa	O,U	1947	600	Flotation	Silver-lead-zinc conc.	On care and maintenance. The Bellekeno and Silver King mines are currently on standby. Their re-opening is planned for April 2001.

Viceroy Resource Corporation Suite 2200 1066 Hastings Street West Vancouver, British Columbia V6E 3X2 Telephone: (604) 688-9780 Facsimile: (604) 682-3941	Brewery Creek mine, Dawson Creek	O	1997	6 850	Heap leaching	Gold	Achieved full commercial production on May 1, 1997.
NORTHWEST TERRITORIES							
Breakwater Resources Ltd. Suite 2000 95 Wellington Street West Toronto, Ontario M5J 2N7 Telephone: (416) 363-4798 Facsimile: (416) 363-1315	Nanisivik, Baffin Island	U	1976	2 000	Flotation	Zinc conc.	
Miramar Con Mine Ltd. P.O. Box 2000 Yellowknife, Northwest Territories X1A 2M1 Contact: Mr. John Stard Telephone: (867) 873-2783, ext. 5324 Facsimile: (867) 873-6357	Miramar Con mine, Yellowknife Giant mine, Yellowknife	U U	1938 1948	750 350	Cyanidation	Gold bullion	Acquired NERCO Con Mine Ltd. from NERCO Minerals Company in October 1993. Con mine was renamed the Miramar Con mine. Ore from the Miramar Con mine is treated in the Con mill; gold bullion bars are shipped to the Royal Canadian Mint in Ottawa for refining. The Rycon mine was purchased outright in 1990 and is now part of the Miramar Con mine. The Giant mine was acquired by Miramar Mining Corporation in December 1999.
NUNAVUT							
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Polaris mine, Little Cornwallis Island	U	1981	2 850	Flotation	Lead conc., zinc conc.	Lead and zinc concentrate are shipped to Europe.

METAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NUNAVUT (cont'd)							
Echo Bay Mines Ltd. Lupin Operations 9818 Edmonton International Airport Edmonton, Alberta T5J 2T2 Contact: Mr. Bill Danyluk, Mine Manager Telephone: (780) 890-8777 Facsimile: (780) 890-8766	Lupin mine, Contwoyto Lake	U	1982	2 300	Cyanidation/ Merrill-Crowe circuit	Gold bullion	Operations at the Lupin mine were restarted in December 1999. Gold production began in April 2000 after a successful re-commissioning process. Annual production is expected to be 150 000 troy oz at 1850 t/d.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NEWFOUNDLAND AND LABRADOR							
Atlantic Minerals Limited P.O. Box 160 Corner Brook, Newfoundland A2H 6C7 Contact: Mr. David Stonehouse Telephone: (709) 634-8255 Facsimile: (709) 634-3939	Lower Cove	O	1996	2.0 Mt/y	Crushing, screening, washing	High-calcium limestone, dolomite, limestone aggregates	Formerly owned by the Newfoundland Resources & Mining Company Limited, which ceased operations in 1995.
Galen Gypsum Mines Limited 143 Main Street Stephenville, Newfoundland A2N 1J4 Contact: Ms. Val Parsons Telephone: (709) 643-2900 Facsimile: (709) 643-5355	Flat Bay, St. George's	O	1995	1 500 (estimate)	Crushing	Gypsum	Formerly owned by Domtar Inc., which ceased production at Flat Bay in September 1994. Reactivated for production in October 1995. There was no activity during the period 1996-2001.
Hurley Slate Works Inc. P.O. Box 160 Manuels, Newfoundland A1W 1M8 Contact: Mr. Harold Kennell Telephone: (709) 834-2186 Facsimile: (709) 834-8856	Long Pond, Manuels		1999	25	Stone cutting	Slate	
Lafarge Gypsum Canada Inc. P.O. Box 700 Corner Brook, Newfoundland A2H 6J7 Telephone: (709) 634-6667	Corner Brook, gypsum wallboard plant	P	1952	200	Crushing, calcining gypsum	Plaster, wallboard	Gypsum from the mine at Fischells, Newfoundland, is used in the manufacture of wallboard and plaster.
	Fischells gypsum quarry	O	1997	100 000 t/y	Quarrying	Gypsum	Gypsum produced is to supply Lafarge gypsum wallboard plant in Corner Brook.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NEWFOUNDLAND AND LABRADOR (cont'd)							
Midatlantic Minerals Inc. 200 - 86 Sainte-Anne Street Sainte-Anne-de-Bellevue, Quebec H9X 1L8 Contact: Mr. Jose Boves Telephone: (514) 457-4321 Facsimile: (514) 457-4147	Aguathuna		1998			Dolomite, limestone	
North Atlantic Refinery Limited P.O. Box 40 Come-by-Chance, Newfoundland A0B 1N0 Contact: Mr. Eugene Grumer Telephone: (709) 463-3407 Facsimile: (709) 463-8076	Come-by-Chance		1995	200	Oil refining	Recovered sulphur	
North Star Cement Limited P.O. Box 160 Corner Brook, Newfoundland A2H 6C7 Contact: Mr. David Stonehouse Telephone: (709) 634-8255 Facsimile: (709) 634-3939	Corner Brook	O	1952, expanded 1966, modern-ized 1986	160 000 t/y	Dry process	Cement	Ceased operations in July 2000.
Trinity Resources & Energy Ltd. Newfoundland Pyrophyllite Division P.O. Box 160 Manuels, Newfoundland A1W 1M8 Contact: Mr. Maxwell Dawe Telephone: (709) 834-2186 Facsimile: (709) 834-8856	Long Pond, Manuels	O	1956	1 000	Crushing	Pyrophyllite	On extended layoff.

United Bolero Development Corporation P.O. Box 128 Buchans, Newfoundland A0H 1G0 Contact: Mr. Paul O'Brien Telephone: (709) 672-3871 Facsimile: (709) 672-3871	Buchans		1998			Barite	

NOVA SCOTIA

Antigonish Limestone c/o Ridge Brokers Ltd. P.O. Box 2001 Havelock, New Brunswick E4Z 6H3 Contact: Mr. Eric Alward Telephone: (506) 534-2241 Facsimile: (506) 534-8263	Antigonish		**	**	Crushing, screening	High-calcium limestone	Pulp and paper, hydro plants and agriculture.
Canadian Salt Company Limited, The Suite 700 755 Saint-Jean Boulevard Pointe-Claire, Quebec H9R 5M9 Contact: Mr. Alan Davidson Telephone: (902) 243-2511 Facsimile: (902) 243-2667	Pugwash	S	1963	310	Vacuum pan evaporation	Evaporated salt	Brine made from mined rock salt used to produce fine evaporated salt.
	Pugwash	U	1959	4 000	Crushing, screening	Rock salt	
E-Z-EM Canada Inc. Nystone Division Debert Industrial Park P.O. Box 69 Debert, Nova Scotia B0M 1G0 Contact: Mr. V.J. Prostak Telephone: (902) 662-3250 Facsimile: (902) 662-3235	Mine - Brookfield, Plant - Debert		1980	70 - feed 10 - product	Beneficiation, ultra-fine grinding	Barium sulphate	High-purity barium sulphate is produced from low-grade ore by wet tabling, magnetic separation, acid washing, ultra-fine grinding and drying.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NOVA SCOTIA (cont'd)							
Fundy Gypsum Company P.O. Box 400 Windsor, Nova Scotia B0N 2T0 Contact: Mr. K.R. Hillman Telephone: (902) 798-4689 Facsimile: (902) 798-5639	Miller's Creek	O	1957	14 500 t/8-hr shift	Crushing	Gypsum	Crude gypsum is shipped to the United States.
	Wentworth	O	1924	2 000 t/8-hr shift	Crushing, heavy media separation	Gypsum, anhydrite	Gypsum and anhydrite are shipped to the United States and Canada. Shiploading operation for gypsum rocks is at Hantsport.
Georgia-Pacific Canada, Inc. P.O. Box 400 Port Hawkesbury, Nova Scotia B0E 2V0 Contact: Mr. Bob Fraser Telephone: (902) 625-9550 Facsimile: (902) 625-1223	Sugar Camp	O	1987	9 000	Crushing	Gypsum	Crude gypsum is shipped to the United States.
Imperial Oil Limited 111 St. Clair Avenue West Toronto, Ontario M5W 1K3 Telephone: (416) 968-4111	Dartmouth		1966	90	Oil refining	Recovered sulphur	
Lafarge Canada Inc. c/o Lafarge Corporation 500 - 12950 World Gate Drive Herndon, VA 20170 U.S.A. Contact: Ms. Danielle Benoit Telephone: (514) 738-1202 Facsimile: (514) 738-1124	Brookfield	O	1964, expanded 1978	605 000 t/y	Wet process	Cement	

Little Narrows Gypsum Company (a division of USG Canadian Mining Ltd.) R.R. 1 Little Narrows, Nova Scotia B0E 1T0 Contact: Mr. Bruce Allen Telephone: (902) 756-2080 Facsimile: (902) 756-2493	Little Narrows	O	1934	4 500 t/8-hr shift	Crushing and screening	Gypsum, anhydrite	Sized crude gypsum and anhydrite are shipped to markets in Quebec and Ontario, and also exported to the United States and Europe.
Mosher Limestone Company Limited P.O. Box 28 Upper Musquodoboit, Nova Scotia B0N 2M0 Telephone: (902) 568-2654 Facsimile: (902) 568-2983	New Campbellton Upper Musquodoboit	O O	1945	800	Crushing, grinding	Limestone, gravel, gypsum	
National Gypsum (Canada) Ltd. P.O. Box 57 Milford Station, Nova Scotia B0N 1Y0 Contact: Mr. P.C. Mills Telephone: (902) 758-3256 Facsimile: (902) 758-3955	Milford Station	O	1955	7 500 t/8-hr shift	Crushing, screening	Gypsum	Crude gypsum is shipped to Canadian and U.S. markets.
Shaw Resources (a Member of the Shaw Group Limited) P.O. Box 60 Hants County Shubenacadie, Nova Scotia B0N 2H0 Contact: Mr. Gordon Dickie Telephone: (902) 758-2095	Shubenacadie	O	1954	1 000 wash, 1 000 dry, 130 magnetic separation	Washing, drying, sizing, magnetic separation	Silica sands (98.5-99.5% silicon dioxide)	Markets full range of bulk and packaged silica sand products throughout Atlantic Canada.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NOVA SCOTIA (cont'd)							
Sifto Canada Inc. 5430 Timberlea Boulevard Mississauga, Ontario L4W 2T7 Contact: Mr. Gary Noseworthy Telephone: (905) 629-7083, ext. 300 Facsimile: (905) 629-8911	Amherst, Nappan	S	1947	280	Evaporation using vapour recompression process	Evaporated salt	Fine salt production.
USG Corporation P.O. Box 2102 MacLean Street - Point Tupper Port Hawkesbury, Nova Scotia B0E 2V0 Contact: Mr. Lloyd George, Plant Manager Telephone: (902) 625-3070 Facsimile: (902) 625-3347	Port Hawkesbury		1990	10 million square metres/y	Crushing, calcining, blending	FibeRock Fiber Gypsum wallboard and underlayment	Plant using cellulose fibre, gypsum and perlite.
NEW BRUNSWICK							
Atlantic Silica Inc. 266 Hillsborough Road Riverview, New Brunswick E1B 4G7 Contact: Mr. B. Pickett Telephone: (506) 387-4648 Facsimile: (506) 387-3080	Cassidy Lake, near Sussex	O	1966	1 000	Washing, crushing, drying, screening, bagging	Sandblast sand, nursery grit, decoration sand, filter media, golf bunker sand, foundry sand	Mined from a granular deposit; particle sizes range up to 50 mm.
CGC Inc. Site 1, Box 1, R.R. 1 Belledune, New Brunswick E0B 1G0 Telephone: (506) 522-0820	Belledune		1995	1 000	Drying, briquetting synthetic gypsum	Processed synthetic gypsum	The synthetic gypsum derived from the desulphurization of stack gases at the New Brunswick Power Corporation plants in Belledune and Dalhousie is dried and agglomerated at this CGC Inc. site for transport to wallboard plants in the United States and Canada.

Irving Oil Limited P.O. Box 1260 Saint John, New Brunswick E2L 4H6 Contact: Mr. Michael Hanrahan Telephone: (506) 633-3000 Facsimile: (506) 633-4002	Saint John		1976	200	Oil refining	Recovered sulphur	
Potash Corporation of Saskatchewan Inc. Cassidy Lake Division P.O. Box 5005 Sussex, New Brunswick E4E 5L1 Telephone: (506) 839-2146 Facsimile: (506) 839-2808	Cassidy Lake	S,M	Restarted mill only in April 1996	400 000 t/y	Compaction, screening	Potash	Potash Corporation of Saskatchewan Inc. purchased the mine site from the Potacan Mining Company in 1996. Granular-grade potash is produced by compacting standard grade received from other mines.
Potash Corporation of Saskatchewan Inc. New Brunswick Division P.O. Box 1489 Sussex, New Brunswick E0E 1P0 Contact: Mr. Brian Roulston Telephone: (506) 433-5445 Facsimile: (506) 433-6617	Sussex	U	1983	770 000 t/y KCl, 700 000 t/y salt	Crushing, flotation	Potash and salt	Three grades of muriate of potash (KCl) are produced from a flotation circuit and a crystallizer circuit.
Shaw Resources Chaleur Silica (member of The Shaw Group Limited) P.O. Box 60 Shubenacadie, Nova Scotia B0N 2H0 Contact: Mr. Glenn Hardie Telephone: (902) 758-2095 Facsimile: (902) 758-3622	Petit Rocher		1976	100 000 t/y	Crushing	Silica	The portable crushing plant processes silica flux for a local smelting operation.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
NEW BRUNSWICK (cont'd)							
Westroc Inc. Quality Way McAdam, New Brunswick E0H 1K0 Contact: Mr. Ivan Charvat Telephone: (905) 823-9661 Facsimile: (905) 823-4464	McAdam plant	P	1990	800	Crushing, calcining	Wallboard	Crude gypsum obtained from Nova Scotia.
QUEBEC							
Baskatong Quartz Inc. P. O. Box 337, Station N.D.G. Montréal, Quebec H4A 3P6 Telephone: (514) 482-6357 Facsimile: (514) 487-9206 E-mail: baskatong@aol.com	Petit Lac Malbaie, Charlevoix County	O	1975	1 500	Crushing, sizing	Quartz	Product sold for the manufacture of silicon metal and also used in the production of ferrosilicon/silicon carbide.
	Sainte-Edwidge-de-Clifton, Clifton County		1993	1 000	Crushing, sizing	Quartz	Closed.
	Saint-Ludger, Risborough County		1995	1 000	Crushing, sizing	Quartz	Closed. Depleted in 1998.
Canadian Salt Company Limited, The Seleine Mines Division Suite 700 755 Saint-Jean Boulevard Pointe-Claire, Quebec H9R 5M9 Contact: Mr. Mark Joncas Telephone: (418) 985-2931 Facsimile: (418) 985-2125	Magdalen Islands		1982	5 000	Crushing and screening, dry processing	Rock salt	

CGC Inc. P.O. Box 4034, Terminal "A" Toronto, Ontario M5W 1K8 Contact: CGC Inc., Mississauga Telephone: (905) 803-5600 Facsimile: (905) 803-5637	Montréal		1954	800	Grinding, calcining	Wallboard, ready-mix compounds	One quarter of the plant's gypsum supply is from synthetic gypsum produced by Kronos Canada, Inc. at Varennes, Quebec. The remainder is synthetic gypsum from New Brunswick Power Corporation at Belledune, New Brunswick.
Ciment Québec Inc. 145 Centenaire Street Saint-Basile-de-Portneuf, Quebec G0A 3G0 Contact: Mr. Luc Papillon Telephone: (418) 329-2100 Facsimile: (418) 329-3436	Saint-Basile-de-Portneuf	O	1951	860 000 t/y	Dry process	Cement	
Ciment St-Laurent (Indépendant) Inc. 966 Des Prairies Road P.O. Box 480 Joliette, Quebec J6E 6H7 Contact: Mr. Dominique Giguère Telephone: (450) 756-1076 Facsimile: (450) 756-0875	Joliette	O	1966	1 075 000 t/y	Dry process	Cement	
Compagnie Bon Sable Ltée, La 3388 Oka Street Saint-Joseph-du-Lac, Quebec J0N 1M0 Contact: Mr. Henri Rybicki Telephone: (450) 473-3600 Facsimile: (450) 473-5780	Dumas Twp., Ormstown	O	1977	600	Washing, drying, screening	Silica sand	Silica sand to foundries for fiberglass, window glass, sandblasting, and also to serve as fill.
Grantech Inc. (a division of Ensio Industries Inc.) Suite 201 1079 Chambly Street Longueuil, Quebec J4H 3M7 Telephone: (450) 677-6333 Facsimile: (450) 587-2072	Contrecoeur plant	P	1979	800	Drying, crushing, sizing, blending, classifying	Natural and coloured mineral aggregate products for asphalt shingles.	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
Jeffrey Mine Inc. 111 Saint-Luc Boulevard P.O. Box 1500 Asbestos, Quebec J1T 3N2 Contact: Mr. Denis Roy Telephone: (819) 879-6004 Facsimile: (819) 879-2659	Jeffrey mine, Asbestos	O	1882	1 200	Dry milling	Chrysotile asbestos	Fibre extracted from ore by crushing, screening and aspiration; asbestos fibre graded according to length and quality. Company named changed from J.M. Asbestos Inc.
Kronos Canada, Inc. 3390 Marie-Victorin Boulevard Varennes, Quebec J3X 1T4 Contact: Mr. J.Y. Bourque Telephone: (514) 929-5013 Facsimile: (514) 929-5102	Varennes		1957	19 000 t/y	Sulphate treatment of titanium slag	Titanium dioxide pigments, liquid titanyl	Production of titanium dioxide pigments through the processing of titanium slag by sulphurization.
			1967	60 000 t/y	Processing chloridation	Titanium dioxide pigments, titanium tetrachloride, 30% hydrochloric acid, ferrous chloride solution	Production of titanium dioxide pigments through the processing of natural rutile ores, titanium slag, and/or upgraded slag.
			1994	70 000 t/y	Limestone neutralization	Synthetic gypsum	Neutralization of sulphuric waste acid with limestone to produce synthetic gypsum.
			1998	20 000 t/y	Limestone neutralization	Carbon dioxide (CO_2 gas)	By-product of neutralization process of sulphuric waste acid.
LAB Chrysotile, Inc. Black Lake, Quebec G6H 2M9 Contact: Mr. Michel Labbé Telephone: (418) 338-7500 Facsimile: (418) 338-7516	Bell operations, Thetford Mines	U	1878	6 300	Dry milling	Chrysotile asbestos	For all operations, fibre is extracted from ore by crushing, screening and aspiration; asbestos fibre is graded according to length and quality.
	Black Lake operations, Black Lake	O	1958	18 000	Dry milling	Chrysotile asbestos	

Lafarge Canada Inc. c/o Lafarge Corporation 500-12950 World Gate Drive Herndon, VA 20170 U.S.A. Contact: Ms. Danielle Benoit Telephone: (514) 738-1202 Facsimile: (514) 738-1124	Saint Constant	O	1965, expanded 1974	1 000 000 t/y	Dry process	Cement	
Luzenac Inc. 423 Wyecroft Road Oakville, Ontario L6K 2H2	Marcoux mine, Potton Twp.	O	1938	••	••	Talc, fillers	The mill closed on May 31, 1996, and has been dismantled. The Marcoux mine is on standby.
Contact: Mr. Chuck Wallace Telephone: (905) 842-7252 Facsimile: (905) 842-8850	Mine, stone quarry and plant, Saint-Pierre-de-Broughton	O,P	1925	50 000 t/y	Open-pit mining, stone cutting, crushing, grinding, micronizing	Steatite (talc) powder and stones	Used in the pulp and paper, paint and coating, roofing, ceramic, plastic, rubber and feedstuff industries.
Orleans Resources Inc. Route des Passes Dangereuses P.O. Box 60 Milot, Quebec G0W 2B0 Telephone: (418) 373-2814 Facsimile: (418) 373-2363	Quarry and plant, St. Onge Twp.	O,P	1997	150	Crushing, dry grinding, flotation, filtering, drying and packaging	Wollastonite concentrate	
Perlite Canada Inc. 571 Lebeau Blvd., Suite 220 Saint-Laurent, Quebec H4N 1S2 Contact: Mr. Richard Barabé Telephone: (514) 336-6665 Facsimile: (514) 336-6651	Plant - Baie-du-Febvre, 556 Grande Plaine, Baie-du-Febvre, Quebec J0G 1A0	P	1990	30	Crushing, grinding, classifying, washing, expanding	Lightweight aggregate (perlite) (vermiculite)	Aggregates marketed for industrial use in agricultural and horticultural applications, as fire-resistant products, and for acoustic and thermal insulation, filtration, cryogenics, lightweight aggregate construction, and hydroponics. Name changed from Vermi-Lite Inc.
Silco Sands Inc. 104 Saint-Remi Boulevard Saint-Rémi, Quebec J0L 2L0 Telephone: (450) 454-5171	Sainte-Clothide, Chateauguay County	O	1979	1 500	Crushing	Silica	Product is sold to a chemical company, cement plants and ferromanganese plants.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
Stratmin Graphite Inc. 585 Graphite Road Lac-des-Îles, Quebec J0W 1J0 Contact: Mr. Ghislain Racicot Telephone: (819) 597-2911, ext. 240 Facsimile: (819) 597-2410	Lac-des-Îles mine/mill	O,M	1990	1 300	Crushing, grinding, flotation, drying, screening, bagging	Natural flake crystalline graphite	Exported to world markets.
Sulconam Inc. 11450 Cherrier Street Montréal-Est, Quebec H1B 1A6 Contact: Mr. Guy Thibault Telephone: (514) 645-1636, ext. 244 Facsimile: (514) 645-6070	Montréal-Est		1956	150 30 (100% base)	Refining	Recovered sulphur Sodium bisulphite, solution (38-42%)	Feedstock obtained from two nearby petroleum refineries. Sulphur is produced by modified Claus process. Plant has pollution control facility. Feedstock is obtained from two nearby petroleum refineries. SBS unit is tail gas unit of Claus process.
Suzorite Mica Products Inc. 1475 Graham Bell Road Boucherville, Quebec J4B 6A1 Telephone: (450) 655-2450 Facsimile: (450) 655-9942	Mine - Lac Letondal, Plant - Boucherville	O,P	1977	100	Dry grinding, pneumatic separation, screening	Suzorite mica (phlogopite), Suzorex, E-Mica	Dry crushed mica (20 to 325 mesh) used mainly as an additive or as a filler in plastics, as a substitute for asbestos, and in the composition of drilling mud and plaster joint filler.
Syquartz Inc. 3095 Westinghouse Street Trois-Rivières, Quebec G9A 5E1 Telephone: (819) 373-2579 Facsimile: (819) 373-3221	Trois-Rivières		1995	50 t/y	hydrothermal synthesis	Synthetic quartz	

Temisca Inc. P.O. Box 304 Saint-Bruno-de-Guigues, Quebec J0Z 2G0 Contact: Mr. Martin Caouette Telephone: (819) 728-2450, ext. 224 Facsimile: (819) 728-2807	Saint-Bruno-de-Guigues		1985	1 000	Scrubbing, washing, drying, classification	Silica	Silica used in silviculture, filtration, sandblasting, foundries, golf course sand, traction sand, and as proppant in fracturing sand.
Tioxide Canada Inc. 1690 Marie-Victorin Highway Tracy, Quebec J3R 1M7 Contact: Ms. Sylvie Marqués Telephone: (514) 746-8211 Facsimile: (514) 746-1788	Tracy		1962	52 000 t/y	Treatment of semi-finished products	Titanium dioxide pigment	Plant closed on June 30, 2000.
Ultramar Limited P.O. Box 41055 Lévis, Quebec G6W 7N1 Telephone: (418) 837-3641	Saint-Romuald		1983	80	Oil refining	Recovered sulphur	
Unimin Canada Ltd. Quebec Operations P.O. Box 700 Saint-Jérôme, Quebec J7Z 5V4 Contact: Mr. G.G. Verret Telephone: (514) 438-1238 Facsimile: (514) 438-9325	Saint-Canut	O	1954	1 800	Crushing, grinding, classifying	Silica	
	Saint-Donat-de-Montcalm	O	1955	1 080	Crushing, grinding, classifying, washing	Silica	Silica shipped from Saint-Donat-de-Montcalm to Saint-Canut for processing into various products.
V.I.L. Vermiculite Inc. (a division of Normiska Corporation) 1775 - 52nd Avenue Lachine, Quebec H8T 2Y1 Contact: Mr. Réjean Mercier Telephone: (514) 631-4251 Facsimile: (514) 631-4254	Lachine		1994	19	Expanding	Lightweight aggregate (perlite)	Used in agriculture, construction, horticulture and industry.
			1947	85	Expanding	Lightweight aggregate (vermiculite)	Aggregates used in bulk form as an insulator agent, for horticultural applications, for industrial production of vermiculite, and for fire-resistant products.
		P	1998 new perlite plant	36	Expanding	Lightweight aggregate (perlite)	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
QUEBEC (cont'd)							
Westroc Inc. 2424 Lakeshore Road West Mississauga, Ontario L5J 1K4 Contact: Mr. Ivan Charvat Telephone: (905) 823-9881 Facsimile: (905) 823-4464	Ville Saint-Catherine		1973	1 000	Crushing, calcining	Plaster, wallboard	Crude gypsum obtained from Nova Scotia.
ONTARIO							
3M Canada Inc. I.M.P. Division R.R. 3 Havelock, Ontario K0L 1Z0 Contact: Mr. J.G. Hudson Telephone: (705) 778-3341, ext. 2011 Facsimile: (705) 778-2050	Havelock	O	1907	160 t/h	Crushing, sizing, colouring	Traprock, roofing granules, commercial aggregates and fillers	
Blue Circle Cement 4th Floor 55 Industrial Street Toronto, Ontario M4G 3W9 Contact: Mr. Bram Vermeulen Telephone: (416) 696-4411 Facsimile: (416) 696-4435	Bowmanville	O	1968, expanded 1990	1 500 000 t/y	Dry process	Cement	
	St. Marys	O	1912, expanded 1977	800 000 t/y	Dry process	Cement	

Canadian Salt Company Limited, The Suite 700 755 Saint-Jean Boulevard Pointe-Claire, Quebec H9R 5M9 (Ojibway mine) Telephone: (519) 966-2142 Facsimile: (519) 972-1777 Contact: Mr. James Vincent (Windsor plant) Telephone: (519) 255-5400 Facsimile: (519) 255-1488	Ojibway	U	1955	8 000	Crushing, screening	Rock salt	Salt graded and prepared for markets.
	Windsor	S	1892	500	Triple-effect vacuum pan evaporation	Evaporated salt	
CGC Inc. P.O. Box 4034, Terminal "A" Toronto, Ontario M5W 1K8 Contact: CGC Inc. Mississauga Telephone: (905) 803-5600 Facsimile: (905) 803-5637	Hagersville	U	1931	2 500	Crushing, calcining	Gypsum, wallboard, ready-mix compounds	One mine/mill complex. Two wallboard lines.
ESSROC Canada Inc. Italcementi Group P.O. Box 620 Picton, Ontario K0K 2T0 Contact: Mr. Fabio Rizzi Telephone: (613) 476-3233 Facsimile: (613) 476-8130	Picton	O	1958	900 000 t/y	Dry process	Cement	
Extender Minerals of Canada Limited 3405 American Drive, Unit 3 Mississauga, Ontario L4V 1T6 Contact: Mr. Robert Hill Telephone: (905) 677-8515 Facsimile: (905) 677-5551	Mill - Matachewan Village, Powell Twp., Mine - Yarrow Twp., Mine - Shining Tree	M,O	1974	20 000 t/y	Crushing, grinding, screening	Barite	Used for various industrial applications such as fillers and extenders in paints, and in plastics, sound barriers, and friction material.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
Federal White Cement Ltd. P.O. Box 548 Woodstock, Ontario N4S 7Y5 Telephone: (519) 485-5410 Facsimile: (519) 485-5892	Woodstock			180 000 t/y	Dry process	Cement	
General Chemical Canada Ltd. P.O. Box 2000 Amherstburg, Ontario N9V 2Z6 Contact: Mr. Don Warren Telephone: (519) 736-2111 Facsimile: (519) 736-8915	Amherstburg		1919	730 000 t/y	Solutioning	Salt brines	Brining to produce sodium carbonate and chloride.
Georgia-Pacific Canada, Inc. 350 Argyle Street North Caledonia, Ontario N3W 1M2 Contact: Mr. Rob Melick Telephone: (905) 765-1541 Facsimile: (905) 765-1597	Caledonia	U	1988	1 600	Crushing, calcining	Gypsum	Used for manufacture of wallboard only at company's plant at Caledonia.
Grace Canada, Inc. Construction Products Division 294 Clements Road West Ajax, Ontario L1S 3C6 Contact: Mr. Mark Blackmore Telephone: (905) 686-5346 Facsimile: (905) 683-0646	Ajax		1973	6 000 t/y	Expanding	Lightweight aggregate (vermiculite)	Vermiculite aggregate used for loose insulation, horticultural products, industrial vermiculite and fire-proofing.
			1978	6 000 t/y	Expanding	Perlite aggregate	Perlite aggregate used for cryogenic insulation, plaster aggregate, and horticultural and industrial purposes.
			1981	6 000 t/y	Expanding	Perlite aggregate	

Hedman Resources Limited 400 - 3875 Keele Street North York, Ontario M3J 1N6 Contact: Mr. John Longstreet (Matheson mill) Telephone: (705) 273-2261 Facsimile: (705) 273-2668 Contact: Mr. Claude Taillefer (Office) Telephone: (416) 630-6991 Facsimile: (416) 630-7904	Mine - Munro and Warden Twps., Plant - Bowman Twp., Matheson, Ont.	O,P	1969	270	Dry milling, expanding	Lizardite serpentine filler	Used as a high heat-resistant powder filler in many industrial applications such as building products, friction materials, paints, plastics and brakes.
Highwood Resources Ltd. Canada Talc Division P.O. Box 537 Marmora, Ontario K0K 2M0 Contact: Mr. Steve Mitchell Telephone: (613) 472-2434 Facsimile: (613) 472-5467 E-mail: cataic@internet_ca	Madoc	O,U	1896	70 (dolomite), 35 (talc)	Crushing, grinding, sizing	Talc, dolomite	Highwood Resources Ltd. purchased Canada Talc Limited in January 1999. High-quality talc suitable as filler material in paint, plastics, fertilizers, building products and paper. The majority of talc mined in Madoc, Ontario, is shipped 20 km to Marmora, Ontario, for processing.
	Marmora		1999	100 (barite)	Micronizing	Barite	Start-up commenced in late fall 1999. Barite production is now operational at anticipated capacities.
			1984	150 (talc)	Crushing, grinding	Talc, dolomite	The majority of the talc mined in Madoc is shipped to Marmora for processing.
Imperial Oil Limited Products and Chemicals Division 111 St. Clair Avenue West Toronto, Ontario M5W 1K3 Telephone: (416) 968-4111	Nanticoke		1978	85	Oil refining	Recovered sulphur	Hydrogen sulphide is removed by diethanolamine absorption. Sulphur is produced by the modified Claus process.
	Sarnia		1964-68	163	Oil refining	Recovered sulphur	
Lafarge Canada Inc. c/o Lafarge Corporation 500 -12950 World Gate Drive Herndon, VA 20170 U.S.A. Contact: Ms. Danielle Benoit Telephone: (514) 738-1202 Facsimile: (514) 738-1124	Bath		1970	1 000 000 t/y	Dry process	Cement	
	Woodstock	O	1956	605 000 t/y	Wet process	Cement	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
Lafarge Canada Inc. Hamilton Slag Division 139 Windermere Road Hamilton, Ontario L8H 3Y2 Contact: Mr. Mike Hesson Telephone: (905) 547-2133, ext. 222 Facsimile: (905) 545-3308	Hamilton		1954	760 cubic metres per day	Pelletizing	Lightweight aggregate (pelletized slag)	Aggregate used in the production of concrete blocks and lightweight ready-mix concrete, and for the manufacture of cementitious hydraulic slag and lightweight fill applications.
Luzenac Inc. 423 Wyecroft Road Oakville, Ontario L6K 2H2 Contact: Mr. Chuck Wallace Telephone: (905) 842-7252 Facsimile: (905) 842-8850	Mine - Penhorwood Twp., 72 km SW of Timmins, Plant - Timmins	O,M	1976	80 000 t/y	Open-pit mining, crushing, grinding, flotation, drying, micronizing	Talc powder, talc pellets	Used in the cosmetics, pulp and paper, paint and coating, roofing, ceramic, plastic, rubber, and feedstuff industries.
Miller Minerals (a division of Miller Paving Limited) P.O. Box 248 New Liskeard, Ontario P0J 1P0 Contact: Mr. Gary Bell (Plant & Administration) Telephone: (705) 672-2282 Facsimile: (705) 672-2746	Haileybury			60 000 t/y		Metallurgical limestone, agricultural lime and aggregates	
OMYA (Canada) Inc. Highway 7 West P.O. Box 245 Perth, Ontario K7H 3E4 Contact: Mr. Olivier Chatillon Telephone: (613) 267-5367, ext. 223 Facsimile: (613) 267-5408	Perty		1986, expanded 2000	**	Beneficiating, ultra-fine wet grinding plant	Ultra-fine calcite in slurry	Ultra-fine calcite slurries are shipped to Canadian and U.S. paper industries. ISO 9002 certified. Expansion completed.
	Tatlock, Plant - Perth	O,P	1978, expanded 1983, expanded 2000	**	Crushing, dry grinding, air classifying	Crushed and pulverized calcite products	Aggregates, screen separator products, and fine/medium-fine products are shipped to Canadian and U.S. markets. New dry plant expansion completed.

Petro-Canada 3275 Rebecca Street Oakville, Ontario L6L 6N5 Contact: Mr. Mark Stevens Telephone: (905) 469-3985 Facsimile: (905) 469-4007	Mississauga		1964	41	Oil refining	Recovered sulphur	
	Oakville		1983	44	Oil refining	Recovered sulphur	
Shell Canada Limited P.O. Box 1480, Station "M" Calgary, Alberta T2P 0L6 Contact: Mr. Guy Stuart Telephone: (403) 691-4392 Facsimile: (403) 269-8814	Sarnia		1966	35	Oil refining	Recovered sulphur	Hydrogen sulphide in refinery gases removed by absorption in an amine solution. Sulphur produced by modified Claus process.
Sifto Canada Inc. 5430 Timberlea Boulevard Mississauga, Ontario L4W 2T7 Contact: Mr. Gary Noseworthy Telephone: (905) 629-7083, ext. 300 Facsimile: (905) 629-8911	Goderich	S	1872	330	Quadruple-effect vacuum pan evaporation	Evaporated salt	
	Goderich	U	1959	10 000	Crushing, screening	Rocks salt	
St. Lawrence Cement Inc. 2391 Lakeshore Road West Mississauga, Ontario L5J 1K1 Contact: Mr. Jacques Nadeau Telephone: (905) 822-1653 Facsimile: (905) 822-5019	Mississauga	O	1956	1.9 Mt/y	Dry process	Cement, Gran Cem (slag)	
Starratt Resources Ltd. 116 - 65 Front Street West Toronto, Ontario M5J 1E6 Contact: Mr. Peter Jorgensen Telephone: (613) 279-2217	Mine/mill near Sharbot Lake	O,M	1968	25	Dry milling	Tremolite "Clarendite Brand"	Reinforcing filler for friction products. Company purchased from Commercial Industrial Minerals Limited on November 18, 1994.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ONTARIO (cont'd)							
Suncor Inc. Sunoco Group 36 York Mills Road North York, Ontario M2P 2C5 Contact: Mr. Marty Dunlop Telephone: (519) 337-2301 Fax: (519) 383-1404	Sarnia		1984	50	Oil refining and chemicals	Recovered sulphur, chemical gasoline, jet fuel, diesel fuel, heating oil, propane	Amine absorption refinery fuel gas.
Unimin Canada Ltd. Nepheline Syenite Operations P.O. Box 2000 Havelock, Ontario K0L 1Z0 Contact: Mr. T.S. Harvey Telephone: (705) 877-2500 Facsimile: (705) 877- 3129	Blue Mountain, Havelock	O	1955	1 100	Crushing, magnetic separation, sizing, fine grinding	Nepheline syenite	
	Nephton Operations, Nephton	O	1936	1 360	Crushing, magnetic separation, sizing, fine grinding	Nepheline syenite	Mill operates three shifts per day, seven days per week, producing several grades of nepheline syenite to meet a wide variety of markets.
Unimin Canada Ltd. Ontario Silica Operations P.O. Box 220 Midland, Ontario L4R 4K8	Killarney, Badgely Island	O	1970	3 800	Crushing, screening, washing	Silica	Seasonal operation from April to November. Two shifts per day, five days per week. Silica sold for ferrosilicon production.
 Contact: Mr. H.P. Bowen Telephone: (705) 526-5476 Facsimile: (705) 526-7161	Midland	O	1970	1 200	Dry milling	Silica	Silica sand and several grades of flour. Operates 5 days per week, 24 hours per day.
Victoria Graphite Inc. Suite 1320 4 King Street West Toronto, Ontario M5H 1B6 Telephone: (416) 363-1240	Mine, Portland	O	1994	60	Grinding, flotation	Flake graphite	Began pilot operation in June 1994. Presently an intermittent operation.
	Processing plant, Perth	P	1997/98				Start-up in 1997/98 of the upgraded processing plant in Perth, Ontario.

Westroc Inc. 2424 Lakeshore Road West Mississauga, Ontario L5J 1K4 Contact: Mr. Ivan Charvat Telephone: (905) 823-9881 Facsimile: (905) 823-4464	Mississauga, Peel County		1963	1 000	Drying, calcining	Wallboard	Synthetic gypsum is obtained from flue-gas desulphurization at Ontario Power Generation Inc.'s Lambton thermal-electric generating station.

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Georgia-Pacific Canada, Inc. 1405 Sargent Avenue Winnipeg, Manitoba R3E 0G6 Contact: Mr. Kurt Ising Telephone: (204) 784-2420 Facsimile: (204) 772-0730	Amaranth	O	1988	900	Crushing	Gypsum	Ships gypsum to Winnipeg plant.
	Winnipeg		1929	480	Crushing, calcining	Plaster and gypsum, wallboard	Manufacturing plant.
Grace Canada, Inc. Construction Products Division 294 Clements Road West Ajax, Ontario L1S 3C6 Contact: Mr. Dennis Iwaniuk Telephone: (780) 454-4511	Winnipeg		1976	6 000 t/y	Expanding	Lightweight aggregate (vermiculite)	Aggregate is used for loose insulation, horticultural products, industrial vermiculite and fireproofing.
			1978	6 000 t/y	Expanding	Perlite aggregate	Perlite aggregate is used for cryogenic insulation, and horticultural and industrial purposes.
Inland Cement Limited P.O. Box 3961 Edmonton, Alberta T5L 4P8 Contact: Mr. Harvey Bell Telephone: (204) 474-1405 Facsimile: (204) 489-1261	Mafeking		1930	2 040	Quarry	Limestone	Limestone is used in the production of Portland cement. Operations ceased in 1992.
Westroc Inc. 2424 Lakeshore Road West Mississauga, Ontario L5J 1K4 Contact: Mr. Ivan Charvat Telephone: (905) 823-9881 Facsimile: (905) 823-4464	Amaranth	O	1978	900	Crushing	Gypsum	Crude gypsum is shipped to the company's calcining plant in Winnipeg.
	Winnipeg	P	1930	450	Crushing, calcining	Plaster, wallboard	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
SASKATCHEWAN							
Agrium Inc. Potash Operations 13131 Lake Fraser Drive, SE Calgary, Alberta T2J 7E8 Contact: Mr. Peter Busse Telephone: (306) 683-1211 Facsimile: (306) 668-2003	Vanscoy	U	1969, 1972 re-opened, 1997 expanded	1.79 Mt/y KCl	Crushing, flotation	Potash	Company name changed on May 10, 1995, from Cominco Fertilizers Ltd. Three grades of potash are produced: standard, coarse and granular. Expansion was completed in late 1997.
Big Quill Resources Inc. P.O. Box 1059 Wynyard, Saskatchewan S0A 4T0 Contact: Mrs. Judy Gudmundson Telephone: (306) 554-3322 Facsimile: (306) 554-3858	Big Quill Lake	M	1992	30	Ion exchange	Potassium sulphate	Started production from sodium sulphate brines in 1992.
			1996	30	Glaserite	Potassium sulphate	Start-up in March 1996.
			1999	80	Glaserite	Potassium sulphate	Start-up in February 1999. Total mill capacity is 40 000 t/y.
Canadian Clay Products Inc. P.O. Box 70 Wilcox, Saskatchewan S0G 5E0 Contact: Ms. Kay Perkin Telephone: (306) 732-2085 Facsimile: (306) 732-2100 Web site: www.canadianclay.com	Wilcox	O	1978	250	Drying, grinding, sizing	Sodium bentonite	Bentonite production for use in the geotechnical industry (slurry wall trenching), and the waste and water lagoon sealing, oil drilling, animal feed, foundry and herbicide industries, as well as for water treatment absorbants.
Canadian Salt Company Limited, The Suite 700 755 St-Jean Boulevard Pointe-Claire, Quebec H9R 5M9 Contact: Mr. Donald Slater Telephone: (306) 345-5200 Facsimile: (306) 345-2552	Belle-Plaine	P	1969	600	Filtering, drying, compaction	Evaporated salt	Plant uses sodium chloride brines produced at the nearby potash solution mine of IMC Kalium Canada Ltd.

Cindercrete Products Ltd. P.O. Box 306 Regina, Saskatchewan S4P 3A1 Contact: Mr. Kevin Tell Telephone: (306) 789-2636 Facsimile: (306) 789-7499	Saskatoon		1978	300 cubic yards/day	Expanding	Lightweight aggregate (expanded clay)	Seasonal.
Consumers' Co-operative Refineries Limited P.O. Box 260 Regina, Saskatchewan S4P 3A1 Contact: Mr. Reid French Telephone: (306) 721-5352 Facsimile: (306) 721-5277	Regina		1988	220	Oil refining	Recovered sulphur	Hydrogen sulphide is removed by diglycolamine absorption. Sulphur is produced in a three-stage Clause Unit with Sulfreen tail gas clean-up.
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Deschambault Lake	O	1973	Standby	**	Silica	High-grade silica flux is used in the Flin Flon, Manitoba, smelter complex. Presently on standby.
	Tyrrell Lake	O	1974	43 000 t/y silica, 4 000 t/y sand and gravel	**	Silica, sand and gravel	Low-grade silica flux is used in the Flin Flon, Manitoba, smelter complex.
IMC Esterhazy Canada Limited Partnership Highway 80 East Esterhazy, Saskatchewan S0A 0X0 Contact: Mr. Don Hood Telephone: (306) 745-4200 Facsimile: (306) 745-2100	K1 mine, Esterhazy	U	1962	1 814 400 t/y KCl, 180 000 t/y rock salt	Crushing, heavy media separation, flotation, crystallization	Potash, by-product rock salt	Three grades of potash are produced: standard, coarse and granular.
	K2 mine, Esterhazy	U	1967	1 995 800 t/y KCl	Crushing, flotation, heavy media separation, crystallization	Potash	Four grades of potash are produced: standard, coarse, granular and agricultural grade (ag white). Company named changed from International Minerals & Chemical Corporation (Canada) Global Limited).
IMC Potash Colonsay Inc. P.O. Box 1500 Colonsay, Saskatchewan S0K 0Z0 Contact: Mr. Kelvin Dereski Telephone: (306) 944-2223 Facsimile: (306) 944-4245	Colonsay	U	1969	1.6 Mt/y KCl, 130 000 t/y salt	Crushing, flotation, crystallization, compaction	Potash, salt	Three grades of muriate of potash (KCl) are produced: standard, coarse and granular. Various grades of salt are also produced. Company name changed from IMC Central Canada Potash Inc.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
SASKATCHEWAN (cont'd)							
IMC Potash Belle-Plaine P.O. Box 7500 Regina, Saskatchewan S4P 4L8 Contact: Mr. Norm Beug Telephone: (306) 345-8400 Facsimile: (306) 345-8200	Belle-Plaine, near Moose Jaw	S	1964	2.2 Mt/y KCl	Multiple-effect evaporators, crystallizers	Potash	Potash-rich solution is evaporated and crystallized to produce four agricultural grades and two industrial grades of potash. Company name changed from IMC Kalium Canada Ltd.
Inland Cement Limited P.O. Box 767, Victoria Plains Regina, Saskatchewan S4P 3A8 Contact: Mr. Harvey Bell Telephone: (204) 474-1405 Facsimile: (204) 489-1261	Regina	O	1956	215 000 t/y	Dry process, crushing, grinding	Cement	Clinker production was suspended; only the distribution facility is operating.
Millar Western Industries Ltd. Palo, Saskatchewan S0K 2K0 Contact: Mr. Gil Heim Telephone: (306) 658-2009 Facsimile: (306) 658-2014	Palo	O	1936	340	Submerged combustion and drying	Sodium sulphate	Salt cake and detergent grades.
NSC Minerals Inc. 2241 Speers Avenue Saskatoon, Saskatchewan S7L 5X6 Telephone: (306) 934-6477 Facsimile: (306) 242-0178	Rocanville		1990	200 000 t/y	Screening	Rock salt	By-product rock salt from potash tailings.
	Vanscoy		1988	200 000 t/y	Screening	Rock salt	By-product rock salt from potash tailings.

Ormiston Mining and Smelting Co. Ltd. 205 - 6223 2nd Sreet SE Calgary, Alberta T2H 1J5 Telephone: (403) 253-7887 Facsimile: (403) 253-1484	Ormiston	P	1930	200	Submerged combustion and drying	Sodium sulphate	Restarted production of sodium sulphate in 1997. Upgraded plant to produce detergent-grade product in 1998. Shut down in December 1998 due to lack of sales.
Potash Corporation of Saskatchewan Inc. Allan Division Allan, Saskatchewan S0K 0C0 Contact: Mr. H. Ewaschuk Telephone: (306) 257-3312, ext. 238 Facsimile: (306) 257-4240	Allan	U	1968	1 885 000 t/y KCl	Crushing, flotation, screening, crystallization, compaction	Potash	Two grades of muriate of potash (KCl) are produced from the flotation circuit and two grades from the crystallizer circuit.
Potash Corporation of Saskatchewan Inc. Cory Division P.O. Box 1320 Saskatoon, Saskatchewan S7K 3N9 Contact: Mr. Dale Johnston Telephone: (306) 382-0525, ext. 101 Facsimile: (306) 384-9132	Saskatoon	U	1968	1 361 000 t/y KCl	Crushing, flotation, crystallization	Potash	Two grades of muriate of potash (KCl) are produced from the crystallizer circuit.
Potash Corporation of Saskatchewan Inc. Lanigan Division 500 - 122 1st Avenue South Saskatoon, Saskatchewan S7K 7E5 Contact: Mr. Wayne Peddle Telephone: (306) 933-8500 Facsimile: (306) 652-2699	Lanigan	U	1968	3 828 000 t/y KCl	Crushing, flotation, screening, compaction, crystallization	Potash	Four grades of potash fertilizer are produced. There are two plants, one of which is idled.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
SASKATCHEWAN (cont'd)							
Potash Corporation of Saskatchewan Inc. Patience Lake Division P.O. Box 509 Saskatoon, Saskatchewan S7K 3L6 Contact: Mr. Moe Davyduke Telephone: (306) 667-4100 Facsimile: (306) 955-0424	Saskatoon	S	1965	1 033 000 t/y KCl	Solution and precipitation in ponds	Potash	Underground operation was converted to solution mining in 1989. Two grades of muriate of potash (KCl) are produced from solution mining.
Potash Corporation of Saskatchewan Inc. Rocanville Division Rocanville, Saskatchewan S0A 3L0 Contact: Mr. Garth Maki Telephone: (306) 645-2870 Facsimile: (306) 645-2733	Rocanville	U	1970	2 295 000 t/y KCl	Crushing, flotation, screening, compaction, crystallization	Potash	Four grades of potash are produced.
Prairie Sulphate Corporation P.O. Box 10 Alsask, Saskatchewan S0L 0A0 (Site) Contact: Mr. Bob Nylen Telephone: (306) 968-2441 Facsimile: (306) 968-2766 E-mail: PSCplant@SK.sympatico.ca (Marketing) 27 Pawson Crescent Saskatoon, Saskatchewan S7H 3X4 Telephone: (306) 477-7750 Facsimile: (306) 477-7251 E-mail: PSC@SK.sympatico.ca	Alsask		2000	50	Ion exchange, evaporation, granulation	Potassium sulphate	Production began in June 2000. Agricultural, industrial and chemical grades are produced and packaged at the site. Company name changed from PSC Alsask Inc.

Red Deer Silica Inc. 3450 Idylwyld Drive North Saskatoon, Saskatchewan S7L 5Y7 Contact: Mr. Edward Budnick Telephone: (306) 934-1781 E-mail: RDI1@home.com	Hudson Bay, Red Deer River	O	1989	700 short tons per 8-hr shift	Drying, screening, blending, bagging	Silica sand	Currently open-face mining on a 10-hectare mine site cleared in 1989. Current washing and screening operation is producing white bunker sand for marketing to the golf course industry, stucco sand, and sandblasting sand. Also producing/marketing top dressing and root zone mix sand(s) from a deposit (95% silicon dioxide) near Borden, Saskatchewan (opened in 1982). Currently in the process of raising capital to construct beneficiation plant near Hudson Bay, Saskatchewan, to exploit vast (14 million proven short tons) reserve of high-grade silica (+99.7% silicon dioxide).
Saskatchewan Minerals (a division of Goldcorp Inc.) P.O. Box 120 Chaplin, Saskatchewan S0H 0V0 Contact: Mr. T.D. Lavineway Telephone: (306) 395-2561 Facsimile: (306) 395-2546	Chaplin	O	1948	420	Multiple-effect evaporation and drying	Soldium sulphate	Detergent-grade produced.
	Ingebrigt	O	1967	500	Submerged combustion, evaporation and drying	Sodium sulphate	Salt cake and detergent-grade produced.
Sifto Canada Inc. 5430 Timberlea Boulevard Mississauga, Ontario L4W 2T7 Contact: Mr. Gary Noseworthy Telephone: (905) 629-7083, ext. 300 Facsimile: (905) 629-8911	Unity	S	1949	500	Quadruple-effect, vacuum pan evaporation	Evaporated salt	
Sterling Pulp Chemicals (Sask) Ltd. P.O. Box 1586 Saskatoon, Saskatchewan S7K 3R3 Contact: Mr. Bill Compton Telephone: (306) 931-7767 Facsimile: (306) 933-0888	Saskatoon	S	1963	100	Chloralkali	Caustic soda, chlorine, hydrochloric acid, hydrogen	Primarily a manufacturer of pulp and water treatment chemicals.
			1979	130	Sodium chlorate	Sodium chlorate	
			1965	25	Calcium hypochlorite	Calcium hypochlorite	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA							
Albchem Industries Ltd. P.O. Box 278 Bruderheim, Alberta T0B 0S0 Contact: Albert Wong Telephone: (780) 796-3900 Facsimile: (780) 796-2226	Bruderheim		1991	43 900 t/y as of Dec. 1999	Solutioning	Salt brine	Brining to produce sodium chlorate.
Alberta Energy Company Ltd. 3700 - 707 8th Avenue SW Calgary, Alberta T2P 1H5 Contact: Mr. Alan Johnston Telephone: (403) 261-2477 Facsimile: (403) 716-2477	Hythe		1983	120	Gas processing	Sulphur	Liquid hydrocarbon recovery by refrigeration. Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the Claus process.
	Sexsmith		1995	475	Gas processing	Sulphur	Liquid hydrocarbon recovery by refrigeration. Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the Super Claus process.
Amoco Canada Petroleum Company P.O. Box 200, Station "M" Calgary, Alberta T2P 2H8 Telephone: (403) 233-1594 Facsimile: (403) 233-5680	Caroline North		1989	10	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by methyldiethanolamine absorption. Sulphur is produced by the modified Claus process.
	Caroline South		1968	6	Gas processing	Sulphur	
	Crossfield		1968	432	Gas processing	Sulphur	
	Kaybob I/II		1968	1 100	Gas processing	Sulphur	
	Whitecourt		1962	1 100	Gas processing	Sulphur	

Anadarko Canada Corporation P.O. Box 39 Gordondale, Alberta T0H 1Y0 Contact: Mr. Daryl Wennerstrom Telephone: (780) 353-3984 Facsimile: (780) 353-3983	Progress	1985, expanded 1995	50	Gas processing	Sulphur	Expanded in 1995 to 135 million cubic feet per day. 98% recovery of sulphur. Company name changed from Union Pacific Resources Inc. in July 2000, when it was bought by Anadarko Canada Corporation.
Anderson Exploration Ltd. P.O. Box 458 Carstairs, Alberta T0M 0N0 Telephone: (403) 232-7100	Carstairs	1960	65	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by diethanolamine absorption. Sulphur is produced by the modified Claus process.
Anderson Exploration Ltd. P.O. Box 700 Wimborne, Alberta T0M 2G0 Contact: Mr. Ron Kooy, Area Superintendent Telephone: (403) 631-3888 Telephone: (403) 631-3925 Facsimile: (403) 264-6545	Wimborne	1965	235	Gas processing	Sulphur	Anderson Exploration Ltd. now owns Ulster Petroleums Ltd. following its acquisition in May 2000.
Baymag Mines Co. Limited 800, 10655 Southport Road SW Calgary, Alberta T2W 4Y1 Contact: Dr. Hagen Schultes Telephone: (403) 271-9400 Facsimile: (403) 271-0010	Exshaw	1982	270	Calcining	Calcined magnesium oxide	Only magnesium oxide producer in Canada.
		1989	50	Fusing	Fused magnesia	
		1997	150	Calcining	Calcined magnesium oxide	
Burlington Resources Canada Energy Ltd. 3500, 250 - 6th Avenue SW Calgary, Alberta T2P 3H7 Telephone: (403) 260-8000	Sturgeon Lake	1969	98	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the modified Claus process. Company name changed from Poco Petroleums Ltd.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA (cont'd)							
Canadian 88 Energy Corporation 700, 400 - 3rd Avenue SW Calgary, Alberta T2P 4H2 Contact: Mr. Michael Hawkings Telephone: (403) 556-3424	Olds		1964	404.9	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by methyldiethanolamine (MDEA) absorption. Sulphur is produced by the Super Claus Process.
Canadian Midstream Services Ltd. P.O. Box 880 Stetler, Alberta T0C 2L0 Contact: Mr. George Overwater, Plant Superintendent Telephone: (403) 742-7200 Facsimile: (403) 742-7230	Nevis		1956	300	Gas processing	Sulphur	Hydrogen sulphide is removed by monoethanolamine absorption. Sulphur is recovered by the modified Claus process and Sulfreen Tail Gas Clean-Up. Company name changed from Western Facilities Management Limited.
Canadian Salt Company Limited, The Suite 700 755 Saint-Jean Boulevard Pointe-Claire, Quebec H9R 5M9 Contact: Mr. Kenneth Palamarek Telephone: (403) 724-3745 Facsimile: (403) 724-3827	Lindbergh	S	1968	390	Triple-effect vacuum pan evaporation, compaction	Evaporated salt	Produces coarse and fine salt.
Chevron Canada Resources 500 - 5th Avenue SW Calgary, Alberta T2P 0L7 Contact: Mr. B.W. Lock Telephone: (403) 234-5672 Facsimile: (403) 234-6206	Kaybob South III		1972	3 557	Gas processing	Sulphur	Hydrogen sulphide is removed by diethanolamine absorption. Sulphur is produced by the Claus process.
	Medicine Lodge		1989	57	Gas processing	Sulphur	Shut down in September 1996. Hydrogen sulphide is removed by diethanolamine absorption. Sulphur is produced by the Claus process.

CXY Chemicals Canada Ltd. Partnership P.O. Box 100 Bruderheim Resources Rd. Bruderheim, Alberta T0B 0S0 Contact: Mr. Jim Connon Telephone: (780) 796-6109 Facsimile: (780) 796-3838	Bruderheim	1991	37 000 t/y as of August 1998	Solutioning	Salt brine	Brining to produce sodium chlorate.
Dow Chemicals Canada Inc. P.O. Box 1012 Sarnia, Ontario N7T 7K7 Contact: Mr. O. Cicchini Telephone: (403) 998-8558 Facsimile: (403) 998-6723	Fort Saskatchewan	1967	4 000	Solutioning	Salt brine	Brining to produce caustic soda and chlorine.
Dynegy Canada Inc. Dynegy Midstream Services Suite 2200 350 - 7th Avenue SW Calgary, Alberta T2P 3N9 Telephone: (403) 213-6000 Facsimile: (403) 213-6005	Mazeppa	1986	577	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the modified Claus process.
ExxonMobil Canada, Ltd. P.O. Box 800 Calgary, Alberta T2P 2J7 Contact: Mr. Lance Berg Telephone: (403) 232-5300	Lone Pine Creek	1971	165	Gas processing	Sulphur	Company name changed from Mobil Oil Canada, Ltd.
Georgia-Pacific Canada, Inc. 403 - 118A Avenue NE Edmonton, Alberta T6S 1C6 Contact: Mr. D. Nielson Telephone: (403) 472-6631 Facsimile: (403) 472-6674	Edmonton	1968	190 000 t/y	Crushing, calcining	Gypsum wallboard	Gypsum for the plant is produced at Canal Flats, British Columbia.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA (cont'd)							
Grace Canada, Inc. Construction Products Division 294 Clements Road West Ajax, Ontario L1S 3C6 Contact: Mr. Dennis Iwaniuk Telephone: (780) 454-4511	Edmonton		1971	6 000 t/y	Exfoliating	Lightweight aggregate (vermiculite)	Aggregate is used for loose insulation, horticultural products, industrial vermiculite and fireproofing.
			1976	6 000 t/y	Expanding	Perlite aggregate	Aggregate is used for cryogenic insulation and horticultural and industrial uses.
Highwood Resources Ltd. Suite 715 734 - 7th Avenue SW Calgary, Alberta T2P 3P8 Contact: Mr. Garry Lynkowski Telephone: (403) 261-3999 Facsimile: (403) 264-2959 E-mail: garryl@telusplanet.net	Mine - 40 km SW of processing plant at Rocky Mountain House	O	1985	50 000 t/y		Limestone, zeolite, gypsum	In January 1997, Limeco Products Limited and Mountain Minerals Co. Ltd. were amalgamated with Highwood Resources Ltd. Plant closed in March 2000.
	Plant - Rocky Mountain House		1985	30 000 t/y	Pulverizing, grinding, pelletizing		
	Plant - Lethbridge		1945	50 000 t/y	Pulverizing, micronizing, sizing	Barite	Barite ore is shipped to Lethbridge for processing. Barite is used in drilling muds and as a filler and extender in paint, plastic and rubber. It is also used in brake linings, sound-dampening, coatings, adhesives and mold washing.
Husky Oil Operations Limited P.O. Box 6525, Station "D" 707 - 8th Avenue SW Calgary, Alberta T2P 3G7 Telephone: (403) 298-7459	Rainbow Lake		1968	142	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by amine absorption.
	Ram River		1972	4 572	Gas processing	Sulphur	Hydrogen sulphide is removed by diethanolamine absorption. Sulphur is produced by the Claus process.
	Lloydminster		1992	340	Oil upgrading	Recovered sulphur	Sulphur recovery is accomplished through amine absorption and the Claus process with SCOT tail gas clean-up.

Imperial Oil Limited 111 St. Clair Avenue West Toronto, Ontario M5W 1K3 Telephone: (416) 968-4111	Edmonton		1975	40	Oil refining	Recovered sulphur	
Imperial Oil Resources Limited 237 - 4th Avenue SW P.O. Box 2480, Station "M" Calgary, Alberta T2P 3M9 Telephone: (403) 237-3874	Bonnie Glen		1974	34.5	Gas processing	Sulphur	Bonnie Glen uses diglycolamine and a Ucarsol selective amine to sweeten gas in the three processing plants. Acid gas from the sweetening process is fed to a three-stage Claus plant for sulphur recovery.
	Quirk Creek		1971	307	Gas processing	Sulphur	The Quirk Creek gas plant has an MCRC Tail Gas Clean-Up Unit. Hydrogen sulphide is removed from natural gas by Flexsorb SE absorption.
	Redwater		1956	11	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by monoethanolamine absorption at Redwater.
Inland Aggregates Limited 222, 885 - 42 Avenue SE Calgary, Alberta T2G 1Y8 Contact: Mr. Leonard Popoff Telephone: (403) 531-3000 Facsimile: (403) 531-3001	Calgary	O	1954	350 cubic metres/day	Expanding	Lightweight aggregate (expanded shale)	Expanded shale is used as a lightweight aggregate in masonry and structural concrete applications. It is also used as a structural lightweight backfill, and in insulating under roads, in retaining walls, and around water lines for frost protection. It is also used for enveloping around gas pipelines in unstable ground conditions and for fireproofing and horticultural soil conditioner.
	Edmonton	O	1953	190 cubic metres/day	Expanding	Lightweight aggregate (expanded clay)	Used for lightweight concrete, masonry units, and lightweight structural insulating fill material.
Inland Cement Limited P.O. Box 3961 Edmonton, Alberta T5L 4P8 Contact: Mr. Robert Rimes Telephone: (780) 420-2500 Facsimile: (780) 420-2528	Plant - Edmonton	P	1956	1 Mt/y	Dry process	Cement	Plant consists of one dry kiln. Dry kiln is a four-stage pre-heater with ESP calciner.
	Quarry - Cadomin	O	••	6 000	••	Limestone	Limestone is used in the production of Portland cement by Inland Cement Limited.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA (cont'd)							
Keyspan Energy Canada Inc. 1700 Canterra Tower 400 - 3rd Avenue SW Calgary, Alberta T2P 4H2 Contact: Mr. Richard Arab Telephone: (403) 205-7694	Paddle River		1966	**	Gas processing	Sulphur	Sulphur in all plants is produced by the modified Claus process. Company name changed from Gulf Midstream Services. Sulphur plant suspended operations. Acid gas reinjection was initiated in 1996. In the Rimbey gas plant, hydrogen sulphide is removed from natural gas by monodiethylamine absorption. In the Strachan gas plant, hydrogen sulphide is removed from natural gas by diethanolamine absorption. A CBA Tail Gas Clean-Up Unit was installed at Strachan. A sulphur degassing unit was installed in 1995.
	Brazeau River-Peco		1969	110	Gas processing	Sulphur	
	Nordegg		1970	47	Gas processing	Sulphur	
	Rimbey		1961	128	Gas processing	Sulphur	
	Strachan		1971	953	Gas processing	Sulphur	
Lafarge Canada Inc. c/o Lafarge Corporation 500 - 12950 World Gate Drive Herndon, VA 20170 U.S.A. Contact: Ms. Danielle Benoit Telephone: (514) 738-1202 Facsimile: (514) 738-1124	Exshaw	O	1911, expanded 1980	1.08 Mt/y cement	Dry process	Cement, limestone	
	Seebe					Shale	
Nexen Inc. 1500, 635 - 8th Avenue SW Calgary, Alberta T2P 3Z1 Contact: Mr. Brian McAusland Telephone: (403) 226-0022 Facsimile: (403) 226-0035	Balzac		1961	410	Gas processing	Sulphur, propane, butane, natural gas and condensate	Hydrogen sulphide is removed from natural gas by diethanolamine (DEA) absorption. Sulphur is produced by the modified Claus process. Company name changed from Canadian Occidental Petroleum Ltd.

Northstar Energy Corporation Suite 3000 400 - 3rd Avenue SW Calgary, Alberta T2P 4H2 Contact: Mr. Bern Bradley Telephone: (403) 562-3100 Facsimile: (403) 563-3662	Coleman		1961	800	Gas processing	Sulphur, natural gas	Hydrogen sulphide is removed by sulfinol solution absorption. Sulphur is recovered by the modified Claus process and Super Claus Tail Gas Clean-Up.
Penn West Petroleum Ltd. 800-111 5th Avenue SW Calgary, Alberta T2P 3Y6 Contact: Mr. Greg Gabert Telephone: (780) 542-8600, ext. 118 Facsimile: (780) 542-2988	Minnehik-Buck Lake		1967	149	Gas processing	Sulphur	Penn West Petroleum Ltd. purchased the Minnehik-Buck Lake gas processing plant from Norcen Energy Resources Limited in 1995. Hydrogen sulphide is removed by methyl-diethanolamine absorption. Sulphur produced by the modified Claus process.
Petro-Canada P.O. Box 2844 Calgary, Alberta T2P 3E3	Brazeau River-Peco		1985, 1990	448	Gas processing	Sulphur	Hydrogen sulphide is removed by diethanolamine absorption. Sulphur is produced by the modified Claus process.
Contact: Mr. Al Mulloy (gas processing) Telephone: (403) 296-5375 Facsimile: (403) 296-3108	Edmonton		1971	56	Oil refining	Recovered sulphur	
	Gold Creek		1970	100	Gas processing	Sulphur	Sold to Rio Alto Exploration Ltd. effective June 1998.
Contact: Mr. Mark Stevens (oil refining) Telephone: (905) 469-3995 Facsimile: (905) 469-4007	Hanlan Robb		1982	1 095	Gas processing	Sulphur	
	Wildcat Hills		1961, 1990	220	Gas processing	Sulphur	
Rio Alto Exploration Ltd. Suite 2500 205 - 5th Avenue SW Calgary, Alberta T2P 2V7 Contact: Operations Manager Telephone: (403) 264-8780 Facsimile: (403) 261-7626	Gold Creek	P	1970	100	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by the Ucarsol amine plant. Sulphur is produced from the hydrogen sulphide by the modified Claus process.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA (cont'd)							
Shell Canada Limited P.O. Box 1480, Station "M" Calgary, Alberta T2P 0L6	Caroline		1993	5 000	Gas processing	Sulphur	Hydrogen sulphide is removed from raw gas by sulfinol/methyldiethanolamine absorption at the Caroline plant. SCOT Tail Gas Clean-Up.
Contact: Mr. Guy Stuart Telephone: (403) 691-4392 Facsimile: (403) 269-8814	Cochrane (Jumping Pound plant)	P	1951	619	Gas processing	Sulphur	Hydrogen sulphide is removed from raw gas by sulfinol absorption at Burnt Timber, Jumping Pound and Waterton plants. Sulphur is produced from hydrogen sulphide by the Claus process at all plants.
	Cremona (Burnt Timber plant)	P	1970	489	Gas processing	Sulphur	SCOT Tail Gas Clean-Up at Waterton.
	Pincher Creek (Waterton plant)	P	1962	3 107	Gas processing	Sulphur	Hydrogen sulphide in refinery gases is removed by amine absorption. Sulphur is produced by the modified Claus process.
	Scotford		1984	14	Oil refining	Recovered sulphur	
Sil Industrial Minerals Inc. Box 6100, Nesc Edmonton, Alberta T5B 4K5 Contact: Mr. Barry Grundy Telephone: (403) 478-7171 Facsimile: (403) 472-6984	Bruderheim	O	1971	1 000	Washing, drying, sizing, magnetic separation, grinding	Silica sand	Fibreglass, foundry, sandblasting, filter grades; golf course sands including bunker, top dressing and root zone mix sand for green construction; silica flour for thermal cement applications; concrete and cement sands.
Suncor Inc. Box 4001 Fort McMurray, Alberta T9H 3E3 Telephone: (403) 743-6471 Facsimile: (403) 743-6853	Fort McMurray	O	1967	441 (1 train), 530 (2 trains)	Oil refining	Recovered sulphur	Sulphur recovery from synthetic crude is by hydrodesulphurization. Super Claus addition in 1994.

Suncor Inc. P.O. Box 38 Calgary, Alberta T2P 2V5 Telephone: (403) 743-6471 Facsimile: (403) 743-6853	Rosevear North		1976	110	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by chemical diethanolamine absorption and converted to elemental sulphur in a Claus plant.
	Rosevear South		1979	171	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the modified Claus process.
	Simonette River		1969	120	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by sulfinol absorption. Sulphur is produced by the modified Claus process.
Syncrude Canada Ltd. P.O. Bag 4009, M.D. 4140 Fort McMurray, Alberta T9H 3L1 Contact: Mr. Ralph O'Grady Telephone: (403) 790-5674 Facsimile: (403) 790-8829	Aurora mine, 40 km NE of Mildred Lake operation		July 2000	150 000 oil-bearing sand	Mining, crushing, slurrying, primary separation facility	Bitumen froth	Product is transported to Mildred Lake facility via pipeline slurry. Product undergoes upgrading at base plant. Total SSB production increased to 255 000 barrels/day.
	Mildred Lake	O	1978	450 000 oil-bearing sand	Bitumen/crude oil facility	Light, sweet crude oil (Syncrude Sweet Blend, SSB)	Upgrading of bitumen is accomplished by a combination of atmospheric and vacuum distillation, hydrocracking and thermal cracking of bitumen to lower boiling point products, and removing sulphur and nitrogen by hydro-treating. Syncrude Canada Ltd. shipped its one billionth barrel of Syncrude Sweet Blend on April 16, 1998.
Talisman Energy Inc. 2400, 855 - 2 Street SW Calgary, Alberta T2P 4J9 (Edson plant) Contact: Mr. Dave Stewart Telephone: (780) 723-9800 (Teepee Creek plant) Contact: Mr. Scott Sobie Telephone: (780) 402-2220	Edson		1965	350	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by diethanolamine absorption. Sulphur is produced by the modified Claus process.
	Teepee Creek		1977	25	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by diethanolamine absorption. Sulphur is produced by the three-stage Claus process.

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
ALBERTA (cont'd)							
TransCanada Pipelines Limited TransCanada Midstream Division 450 First Avenue Calgary, Alberta T2P 5H1 Contact: Ms. Petra Struck Telephone: (403) 213-4140 Facsimile: (403) 213-3559	Harmattan		1966	82	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by MDEA absorption. Sulphur is produced by the modified Claus/MCRC process.
	Zama		1968 (plant #1)	80	Gas processing	Sulphur	Modified Claus process.
			1995 (plant #2)	••			Acid gas injection.
			1998 (plant #3)	••			Acid gas injection.
Westroc Inc. 2424 Lakeshore Road West Mississauga, Ontario L5J 1K4 Contact: Mr. Ivan Charvat Telephone: (905) 823-9881 Facsimile: (905) 823-4464	Calgary		1980 (new site)	800	Crushing, calcining	Wallboard	Gypsum is obtained from Windermere, British Columbia.
Wolcott Gas Processing Ltd. Suite 1920 205 - 5th Avenue SW Calgary, Alberta T2P 2V7 Contact: Mr. Barry Winger Telephone: (403) 261-6183 Facsimile: (403) 266-1497	West Pembina		1984	350	Gas processing	Sulphur	

BRITISH COLUMBIA

Amoco Canada Petroleum Company P.O. Box 200, Station "M" Calgary, Alberta T2P 2H8 Telephone: (403) 233-1594 Facsimile: (403) 233-5680	Cypress	1989	10	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by methyldiethanolamine absorption. Sulphur is produced by the modified Claus process.
C2C Mining Corporation Bay 8 3716 - 56 Avenue, SE Calgary, Alberta T2C 2B5 Contact: Mr. LuVerne Hogg Contact: Mr. Dave Koop Telephone: (403) 264-5352 Facsimile: (403) 264-5365 E-mail: c2c@ezpost.com Web site: www.C2Cminingcorp.com	Ashcroft	1998	100	Crushing, calcining, rotary kiln, sizing	Zeolite	
		1998	• •	Crushing, drying, sizing	Pyrophyllite	Pilot testing at Ashcroft plant.
Canada Pumice Corporation P.O. Box 26, Main Station Abbotsford, British Columbia V2S 4N7 Contact: Mr. Brian Wear Telephone: (604) 852-1888 Facsimile: (604) 852-2775 E-mail: LavaKing@telus.net (Quesnel) Telephone: (250) 992-7955 (Shop) Telephone: (250) 992-7188	Nakzo, Quesnel	1990	600	Dry screening	Black pumice, lapillo, vesicular basalt, lava rock	Lightweight aggregate is used for lightweight insulating trenchfill, lightweight concrete, multi-coloured landscape rock, specialty sands for all-weather sports fields, natural fertilizer and soil amendment, growing medium, gas BBQ briquettes, industrial ceramics, filters (for greenhouse gardening), loose insulation, refractories, and winter road abrasive.
Cassiar Magnesium Inc. Suite 1910 777 Bay Street Toronto, Ontario M5G 2C8 Telephone: (416) 204-1455 Facsimile: (416) 204-1450	Cassiar	1999	550, increasing to 2 050	Dry process, wet process	Chrysotile fibre (equivalent chrysotile production 18 000 t/y, going to 40 000 t/y)	Production start-up in December 1999.
		2001	30 000		Magnesium metal (equivalent magnesium metal 200 million lb/y)	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
BRITISH COLUMBIA (cont'd)							
Chevron Canada Limited 1500 - 1050 West Pender Street Vancouver, British Columbia V6E 3T4 Telephone: (604) 668-5521 Facsimile: (604) 668-5639	Burnaby		1994	12	Oil refining	Recovered sulphur	
Clayburn Industries Ltd. 33765 Pine Street Abbotsford, British Columbia V2S 5C1 Contact: Mr. John Rennie Telephone: (604) 859-5288 Facsimile: (604) 859-0424	Abbotsford		Early 1900s	150	Calcining	Calcined shale and fireclay	
	Kilgard		••	40 000 t/y	Quarry	Shale	Used for brick and refractory castable manufacturing at the Abbotsford plant.
Fireside Minerals Ltd. Suite 204 4406 - 50th Avenue Red Deer, Alberta T4N 3Z6 Contact: Mr. Gordon Webster Telephone: (403) 343-7764 Facsimile: (403) 343-3563	Watson Lake	O	1997	200	Production of drilling mud		
Georgia-Pacific Canada, Inc. 12509 - 116th Avenue Surrey, British Columbia V3V 3S6 Contact: Mr. Tom Brooks Telephone: (604) 580-0642 Facsimile: (604) 580-1073	Canal Flats		1984	200 000 t/y	Quarry	Gypsum	Gypsum is shipped to Edmonton.
	Surrey		1920	510	Crushing, calcining	Gypsum wallboard	Gypsum for the plant is produced in Mexico.

Great Pacific Pumice Inc. 790 Millbank Road Vancouver, British Columbia V5Z 3Z3 Telephone: (604) 250-2750 Facsimile: (604) 879-6411	Mt. Meager, Pemberton	O	1996	500 cubic metres	Crushing, screening	Pumice	Pumice is used as a horticultural soil conditioner and as a hydroponic growing medium. Used as a lightweight aggregate for masonry, structural concrete, geotechnical lightweight fill and insulating fill. Also used for sports field construction and conditioning, landscape boulders, cosmetic stones and stonewashing fabrics.
Highwood Resources Ltd. Suite 715 734 - 7th Avenue SW Calgary, Alberta T2P 3P8	Mine, Moberly	O	1980			Silica	Silica from Moberly is shipped to Golden for processing. Silica is used for glass containers. Also used for sandblast, foundry, golf course and filter media.
Contact: Mr. Garry Lynkowski Telephone: (403) 261-3999 Facsimile: (403) 264-2959 E-mail: garryl@telusplanet.net	Plant, Golden	P	1980	150 000 t/y	Crushing, washing, drying, sizing	Silica	
Lafarge Canada Inc. R.R. 2 Shuswap Road Kamloops, British Columbia V2C 2J3 Contact: Mr. John Wong Telephone: (250) 573-3211 Facsimile: (250) 573-4010	Kamloops		1970	50 000	Quarry	Gypsum, limestone, silica materials	Used in cement manufacture.
Lafarge Canada Inc. c/o Lafarge Corporation 500-12950 World Gate Drive Herndon, VA 20170 U.S.A. Contact: Ms. Daniella Benoit Telephone: (514) 738-1202 Facsimile: (514) 738-1124	Falkland					Gypsum	
	Kamloops	O	1967	410 000 t/y	Dry process	Cement	
	Richmond	O	1956	1 000 000 t/y	Dry process	Cement	
	Sumas					Shale	

INDUSTRIAL MINERAL MINES AND PROCESSING PLANTS BY PROVINCE AND TERRITORY (cont'd)

Operator	Location of Plant or Mine	Type	Start-Up Date	Mill/Plant Capacity (tonnes/day)	Process	Products	Remarks
BRITISH COLUMBIA (cont'd)							
Petro-Canada P.O. Box 2844 Calgary, Alberta T2P 3E3 Contact: Mr. Al Mulloy (gas processing) Telephone: (403) 296-5375 Facsimile: (403) 296-3108	Boundary Lake II		1994	8	Gas processing	Sulphur	Acquired from Amerada Hess Canada Ltd. in June 1996.
Tilbury Cement Limited 7777 Ross Road P.O. Box 950 Delta, British Columbia V4K 3S6 Contact: Mr. Ray Romaniuk Telephone: (604) 946-0411 Facsimile: (604) 946-9215	Delta		1978	1 100 000 t/y	Dry process	Cement	Produced from limestone, shale sand (siliceous ore), iron slag and gypsum.
TransCanada Pipelines Limited TransCanada Midstream Division 450 First Avenue Calgary, Alberta T2P 5H1 Contact: Ms. Petra Struck Telephone: (403) 213-4140 Facsimile: (403) 213-3559	Caribou		1997	**	Gas processing	Sulphur	Acid gas injection.
Westcoast Energy Inc. 2200, 333 - 7 Avenue SW Calgary, Alberta T2P 2Z1 Contact: Mr. Glenn Kowalsky Telephone: (403) 297-1784 Facsimile: (403) 297-1799	Fort Nelson		1965	600	Gas processing	Sulphur	Hydrogen sulphide is removed from natural gas by alkanolamine absorption. Sulphur is produced by the Claus, Sulfreen and MCRC processes.
	Pine River		1980	2 000	Gas processing	Sulphur	
	Taylor		1957	550	Gas processing	Sulphur	

Westroc Inc. 2424 Lakeshore Road West Mississauga, Ontario L5J 1K4 Contact: Mr. Ivan Charvat Telephone: (905) 823-9881 Facsimile: (905) 823-4464	Vancouver	P	1973 (new plant)	600	Crushing, calcining	Wallboard	Gypsum is obtained from Windermere Creek, British Columbia.
	Windermere Creek, Invermere	O	1957	3 200	Crushing	Gypsum	Crude gypsum is shipped to the company's calcining plants in Vancouver and Calgary, and to other customers for use in the manufacture of gypsum and cement products.

NORTHWEST TERRITORIES

BHP Diamonds Inc. 2650 Park Place 666 Burrard Street Vancouver, British Columbia V6C 2X8 Contact: Mr. Graham Nicholls Telephone: (604) 605-8666 Facsimile: (604) 681-5736	Ekati mine, Lac de Gras	O	1998	9 000	Crushing, separation by dense media and x-ray sorters	Diamonds	Canada's first diamond mine. Joint venture: BHP Diamonds Inc. (51%), Dia Met Minerals Ltd. (29%), Charles E. Fipke (10%) and Stewart L. Blusson (10%).

LIME PRODUCERS BY PROVINCE

Operator	Quarry or Plant Location	Crushing/ Calcining Capacity (tonnes/day)	V - Vertical R - Rotary O - Other No. of Kilns	Products	If Stone is Purchased From Where, Whom and Predominant Usage
NEW BRUNSWICK					
Graymont (NB) Inc. 4634 Route 880 Havelock, New Brunswick E4Z 5K8	Havelock	2 400	**	Hydra-lime+, Aglime, filler, crushed stone, high-calcium stone, lime dust, pulverized limestone	Livestock feed supplements, industrial filler, pulp and paper mills, glass manufacture and agriculture. Company name changed from Havelock Lime.
Contact: Mr. Frank Derrah Telephone: (506) 534-2311 Facsimile: (506) 534-8241		450	V-1 R-1	Quicklime, hydrated lime	Quicklime is used in the pulp and paper, mining and steel industries. Hydrated lime is used in mining and leaching operations and also for pH control.
QUEBEC					
Graymont (Qc) Inc. 25 De Lauzon Street Boucherville, Quebec J4B 1E7	Bedford	2 500/ 550	R-1		
	Joliette	6 000/ 650	R-2	High-calcium lime, quicklime, slaked lime, screened limestone, pulverized limestone	Steel, paper, chemical, mining, aluminum, gas desulphurization, pH control and water treatment. Company name changed from Graybec Inc.
Contact: Mr. Germain Meunier Telephone: (450) 449-2262 Facsimile: (450) 449-2256	Marbleton	2 800/ 925	V-1 R-1		
ONTARIO					
Algoma Steel Inc. P.O. Box 1400 Sault Ste. Marie, Ontario P6A 5P2	Sault Ste. Marie	**/ 600	R	High-calcium lime, dolomitic lime	Limestone is purchased from Michigan Limestone, Roger City. Dolomite is purchased from Michigan Limestone at Cedarville, Michigan.
Contact: Mr. Gary Pidgen Telephone: (705) 945-3485 Facsimile: (705) 945-4680					

Beachville Lime Limited P.O. Box 190 Ingersoll, Ontario N5C 3K5 Contact: Mr. Steven Brookshaw Telephone: (519) 423-6283, ext. 230 Facsimile: (519) 423-6545	Beachville	Limestone - 10 800 Dried limestone - 1 045 Lime - 2 300 Hydrated - 400	R-5 O-1	High-calcium lime, pulverized limestone, sized limestone	End Uses: Limestone - metallurgical stone, aggregates, emission control. Dried limestone - filler, glass and carpet industries, agriculture. Lime - steel, building, mining, effluent treatment, paper. Hydrated - effluent treatment, apple storage, mining. Company name changed from BeachviLime Limited.
Beachville Lime Limited P.O. Box 190 Ingersoll, Ontario N5C 3K5 Contact: Mr. Dick Bowman Telephone: (519) 423-6283, ext. 290 Facsimile: (519) 423-6135	Ingersoll	5 000/ 675	V-3 R-1	High-calcium limestone, quicklime	West Plant - Beachville Lime. Limestone - metallurgical stone, aggregate for asphalt, concrete and road building. Lime - steel, mining, effluent treatment.
Guelph DoLime Limited P.O. Box 217 Ingersoll, Ontario N5C 3K5 Contact: Mr. Steven Brookshaw Telephone: (519) 423-6283, ext. 230 Facsimile: (519) 824-0248	Guelph	800/ 275	V-10	Dolomitic stone	Subsidiary of Beachville Lime Limited, Ingersoll, Ontario.
Lafarge Lime (Canada) Inc. Dundas Division 447 Moxley Road, R.R. 2 Dundas, Ontario L9H 5E2 Contact: Mr. Brian Gatt Telephone: (905) 628-7660 Facsimile: (905) 627-9529	Dundas	1 000/ 958	R-3	Dead burnt dolomite, dolomitic lime, refractory lime	Steel, metallurgical and glass industries.

LIME PRODUCERS BY PROVINCE (cont'd)

Operator	Quarry or Plant Location	Crushing/ Calcining Capacity (tonnes/day)	V - Vertical R - Rotary O - Other No. of Kilns	Products	If Stone is Purchased From Where, Whom and Predominant Usage
ONTARIO (cont'd)					
Miller Minerals (a division of Miller Paving Limited) P.O. Box 248 ew Liskeard, Ontario P0J 1P0 Contact: Mr. Gary Bell (Plant & Administration) Telephone: (705) 672-2282 Facsimile: (705) 672-2746	Haileybury	45 000 t/y 60 000 t/y	V-1 V-1	High-calcium lime Metallurgical limestone, agricultural lime and aggregates	
Northern Lime Limited P.O. Box 1690 Blind River, Ontario P0R 1B0 Contact: Mr. Steve François Telephone: (705) 849-2201 Facsimile: (705) 849-2355	Spragge	*/ 555	R-2	Lime	Formerly Koch Minerals of Canada Limited. Water treatment, paper.
Timminco Limited 10 Bay Street, 9th Floor Toronto, Ontario M5J 2R8 Telephone: (613) 432-3621	Haley Station	450/ 145	R-2	Calcined dolomite	For internal production of magnesium metal.
MANITOBA					
Graymont Western Canada Inc. 190 - 3025 12th Street NE Calgary, Alberta T2E 7J2 Contact: Mr. Dave Grant Telephone: (204) 449-2078	Faulkner	1 440/ 320	R-1	Crushed stone, high-calcium quicklime, calcium carbonate powders	Company name changed from Continental Lime Ltd.

ALBERTA

Graymont Western Canada Inc. 190 - 3025 12th Street NE Calgary, Alberta T2E 7J2 Contact: Mr. Ross Taylor Telephone: (403) 673-3595	Exshaw	2 070/ 544	R-2	Pebble and crushed high-calcium lime, hydrated lime, calcium carbonate powders, granulated limestone	Company name changed from Continental Lime Ltd.
Graymont Western Canada Inc. (Summit Plant) 190 - 3025 12th Street NE Calgary, Alberta T2E 7J2 Contact: Mr. Al Lucas Telephone: (403) 563-3374	Hazell	1 200/ 230	V-4	Crushed and pulverized high-calcium lime, hydrated lime, pulverized limestone	Company name changed from Continental Lime Ltd.
Rogers Sugar Ltd. 5405 - 64th Street Taber, Alberta T1G 2C4 Contact: Mr. Cliff Thomas Telephone: (403) 223-3535 Facsimile: (403) 223-9699	Taber	*/ 180	V-1	High-calcium lime	Captive use. Limestone is purchased from Nordegg Lime Ltd. Company name changed from Alberta Sugar Company.

BRITISH COLUMBIA

Chemical Lime Company of Canada Inc. 20303 - 102B Avenue Langley, British Columbia V1M 3H1 Contact: Mr. R.M. Horsman, Plant Manager Telephone: (604) 888-4333 Contact: Mr. Scott Hinds, General Manager Telephone: (604) 888-2575 Facsimile: (604) 888-4238	Langley	600/ 400	2 calciners	High-calcium quicklime, ground limestone, agricultural limestone, hydrated lime, lime slurry	Purchased from Texada Quarrying Ltd., Texada Island.

LIME PRODUCERS BY PROVINCE (cont'd)

Operator	Quarry or Plant Location	Crushing/ Calcining Capacity (tonnes/day)	V - Vertical R - Rotary O - Other No. of Kilns	Products	If Stone is Purchased From Where, Whom and Predominant Usage
BRITISH COLUMBIA (cont'd)					
Graymont Western Canada Inc. 190 - 3025 12th Street NE Calgary, Alberta T2E 7J2 Contact: Mr. Larry Gelsinger Telephone: (250) 457-6291	Pavilion Lake	2 050/ 510	R-2	Crushed stone, high-calcium quicklime	Company name changed from Continental Lime Ltd.

METALLURGICAL WORKS IN CANADA – NONFERROUS AND PRECIOUS METALS

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
ALUMINUM				
Alcan Smelters and Chemicals Limited 1188 Sherbrooke Street West Montréal, Quebec H3A 3G2 Contact: Mr. Carmine Nappi Telephone: (514) 848-8134 Facsimile: (514) 848-1410	Alma	400 000		Plant will open in the third quarter of 2000.
	Alma, Isle Maligne, Quebec	50 000	Primary aluminum, pure or alloyed; forms: hot metal, ingot for remelting, extrusion billets, rolling blocks, wire bars for fabrication; brand Alcan	Aluminum smelter. The closing process has started and the plant will be permanently closed by the end of 1999. Isle Maligne closed in March 2000.
	Beauharnois, Quebec	49 000		Aluminum smelter.
	Jonquière, Quebec	238 000		Aluminum smelter. Inorganic chemical complex. Petroleum coke calcining plant.
	La Baie, Quebec	186 000		Aluminum smelter.
	Laterrière, Quebec	210 000		Aluminum smelter.
	Shawinigan, Quebec	88 000		Aluminum smelter.
	Kitimat, British Columbia	272 000		Aluminum smelter. Petroleum coke calcining plant.
Alcoa Aluminerie Lauralco Inc. 1 Des Sources Boulevard Deschambault, Quebec G0A 1S0 Contact: Ms. Lucille Montambault Telephone: (418) 286-5287 Facsimile: (418) 286-5405	Deschambault, Quebec	244 933	Primary aluminum in T-ingot forms	Aluminum smelter. ISO 9002 and ISO 14001.
Aluminerie Alouette Inc. 400 de la Pointe-Noire Road P.O. Box 1650 Sept-Îles, Quebec G4R 5M9 Contact: Ms. Gloria Pardini Telephone: (418) 964-7340 Facsimile: (418) 964-7300	Sept-Îles, Quebec	242 000	Primary aluminum ingots and pigs	Aluminum smelter.

Aluminerie de Bécancour Inc. 5555 Pierre-Thibault Street Bécancour, Quebec G0X 1B0 Contact: Ms. Karen Loiselle Telephone: (819) 294-3013 Facsimile: (819) 294-3011	Bécancour, Quebec	390 000	Primary aluminum billets and plate in ingot forms	Aluminum smelter.
Canadian Reynolds Metals Company, Limited 100 Maritime Road Baie-Comeau, Quebec G4Z 2L6 Contact: Mr. Lucien Larouche Telephone: (418) 296-7193 Facsimile: (418) 294-7702	Baie-Comeau, Quebec	400 000	Primary aluminum, pure or alloyed, in ingot forms for remelting sheet ingots, extrusion billets, rod	Aluminum smelter.

ANTIMONIAL LEAD

Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	6 000 (antimonial lead)	"Cominco Brand" in 56-lb pigs; antimony content, 17-25%; arsenic content, 1-7%. Also made in 5000-lb blocks	Reduction in short rotary furnace of slag from softener.
Noranda Inc. Brunswick Smelter 692 Main Street Belledune, New Brunswick E8G 2M1 Contact: Mr. Phil Evans Telephone: (506) 522-2100 Facsimile: (506) 522-7089	Belledune, New Brunswick	3 000 (antimonial lead)	Antimony content, 6-10% in 5000-lb blocks	Reduction in short rotary furnace as softening slag.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
ARSENICAL LEAD				
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	400	56-lb pigs	
BISMUTH				
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	300	"Tadanac Brand" in 28-lb bars (intermittent operation) (99.99%); also 5/9 grade of high-purity bismuth	Bismuth-lead-copper slags from the silver refining process are treated using the Parkes and chlorination process to produce refined bismuth.
Noranda Inc. Brunswick Smelter 692 Main Street Belledune, New Brunswick E8G 2M1 Contact: Mr. Phil Evans Telephone: (506) 522-2100 Facsimile: (506) 522-7069	Belledune, New Brunswick	3 000	Lead-bismuth alloy, 8.5% bismuth	Produced as a co-product of lead refinery.

CADMIUM

Canadian Electrolytic Zinc Limited (div. of Noranda Inc.) 860 Cadieux Boulevard Valleyfield, Quebec J6S 4W2 Contact: Ms. Mary Deeley Telephone: (416) 982-7249 Facsimile: (416) 982-7498	Valleyfield, Quebec	440	Metallic cadmium, sold as "CEZ Brand," in stick; ball	Cadmium residues from zinc refining; leached and precipitated as sponge, briquetted and cast.
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	1 000	Cadmium-tin-lead in 100-lb pigs and 2000-lb jumbos	
		1 300	"Tadanac Brand" in ball and stick	Cadmium residues from zinc refining; leached and precipitated as sponge, briquetted and cast.
Falconbridge Limited Kidd Metallurgical Division P.O. Box 2002 Timmins, Ontario P4N 7K1 Contact: Mr. Claud[illegible]rron Telephone: (705) 235-8121, ext. 7549 Facsimile: (705) 235-7318	Timmins, Ontario	800	Jumbo blocks	Cadmium residues from zinc solution are precipitated, purified and cast.
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Flin Flon, Manitoba	• •	Metallic cadmium in ball and stick form	Cadmium residues from zinc solution are precipitated and leached; metal is recovered by electrolysis.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
CALCIUM				
Timminco Limited 10 Bay Street, 9th Floor Toronto, Ontario M5J 2R8 Telephone: (613) 432-3621	Haley Station, Ontario	900	Calcium - lumps, ingots, billets, granules, rods, calcium-aluminum alloys	Reduction of lime by aluminum under high vacuum in gas-fired retort furnaces. Calcium production is not currently active; retort furnace capacity has been switched to magnesium.
CALCIUM LEAD				
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	8 000	2000-lb jumbos	
COBALT				
Cobalt Refinery Company Inc., The 10101 - 114th Street Box 2000 Fort Saskatchewan, Alberta T8L 4G6 Contact: Mr. Dennis Maschmeyer Telephone: (780) 992-7000 Facsimile: (780) 998-7171	Fort Saskatchewan, Alberta	2 700	Refined cobalt metal (briquettes and powder)	Proprietary hydrometallurgical plant employing ammonia leach and hydrogen reduction technology for processing nickel- and cobalt-containing feed materials into refined nickel and cobalt products. Ammonium sulphate, copper sulphide and zinc sulphide are also produced.
Inco Limited Suite 1500 145 King Street West Toronto, Ontario M5H 4B7	Port Colborne, Ontario	1 360	Electrocobalt	Electrocobalt produced from CRED residue.
	Thompson, Manitoba	470	Cobalt oxide	Cobalt oxide recovered from nickel refinery electrolyte.

COPPER

Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	9 000	Copper lead	56- and 100-lb pigs; 2000-lb jumbos.
		6 000	Copper sulphate	Treatment of copper matte.
		600	Copper arsenate	Treatment of copper matte, silver refinery dust, and stockpile material.
		2 000	Sodium antimonate	
Falconbridge Limited Kidd Metallurgical Division P.O. Box 2002 Timmins, Ontario P4N 7K1 Contact: Mr. Claude Ferron Telephone: (705) 235-8121, ext. 7549 Facsimile: (705) 235-7318	Timmins, Ontario	145 000	Copper cathode	Mitsubishi continuous smelting.
		150 000	Blister copper	Hazelett continuous cast anodes.
Falconbridge Limited Sudbury Division Falconbridge, Ontario P0M 1S0 Contact: Mr. A.G. Hayward Telephone: (705) 693-2761 Facsimile: (705) 699-3110	Falconbridge, Ontario	600 000 (conc.)	Copper-nickel matte	Copper-nickel conc. is roasted and then smelted in electric furnaces and converted to produce matte for shipment to the company's electrolytic refinery in Norway.
Gibraltar Mines Limited (a subsidiary of Taseko Mines Limited) P.O. Box 130 McLeese Lake, British Columbia V0L 1P0 Contact: Mr. John Hutchings, Mine Manager Telephone: (250) 297-6211, ext. 364 Facsimile: (250) 297-6548	McLeese Lake, British Columbia	9 000	Cathode copper	Dissolved copper-in-solution from heap leaching operations is treated in a solvent extraction plant and then electrowinned to produce copper cathode.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Flin Flon, Manitoba	80 000 copper	Anode copper	Roasting furnaces, one reverberatory furnace and two converters for treating copper flotation conc. and zinc-plant residues. Additional concentrates are purchased and processed to metal in the copper metallurgical plant.
Inco Limited Suite 1500 145 King Street West Toronto, Ontario M5H 4B7	Copper Cliff, Ontario	170 000	Blister copper, for company's refinery	Oxygen flash smelting of nickel-copper conc. Through flotation separation of copper-nickel in bessemer matte, copper sulphides are melted and blown to produce blister copper.
		170 000	"ORC" brand electrolytic copper cathodes	Blister copper is processed in anode furnaces and refined by electrolysis. Recovers and electrowins copper from nickel refinery residue.
Noranda Inc. Brunswick Smelter 692 Main Street Belledune, New Brunswick E8G 2M1 Contact: Mr. Phil Evans Telephone: (506) 522-2100 Facsimile: (506) 522-7089	Belledune, New Brunswick	4 000	Copper-lead matte	Co-product of lead refinery.
Noranda Inc. CCR Division 220 Durocher Street Montréal-Est, Quebec H1B 5H6 Telephone: (514) 645-2311	Montréal-Est, Quebec	360 000	Electrolytic copper "CCR Brand" ingot bars, ingots, cathodes, cakes and billets	Refines anode copper from the Horne and Gaspé smelters, as well as purchased scrap and blister.
		8 000 kg	Copper sulphate by vacuum evaporation and crystallization; "Noranda Brand" in regular commercial and agricultural grades	

Noranda Inc. Horne Smelter P.O. Box 4000 Rouyn-Noranda, Quebec J9X 5B6 Contact: Mr. Claude Bélanger Telephone: (819) 762-7764 Facsimile: (819) 762-1976	Rouyn-Noranda, Quebec	900 000	Copper anodes	Processes copper conc. from mines worldwide. Also smelts custom materials including scrap. Sulphuric acid plant in operation.
Noranda Inc. Mines Gaspé Division 53, chemin de la mine Murdochville, Quebec G0E 1W0 Contact: Mr. Serge St-Pierre Telephone: (418) 784-4201 Facsimile: (418) 784-2503	Murdochville, Quebec	320 000 (conc. and copper scrap)	Copper anodes	One reverberatory furnace for wet charge concentrates, three Pierce-Smith converters with concentrate injection, one anode furnace, and one Outukumpu casting wheel. Processes copper conc. originating from its own E Zone mine and Mount Copper pit, and local mines. Its annual capacity is expected to increase to 350 000 t/y in 1999. Since October 1999, only concentrates and scrap from outside sources have been processed.
INDIUM				
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	45 000 kg	"Cominco Brand" standard grade ingots, 99.999 grade ingots, 1, 3 and 10 kg	By-products of zinc-lead production. This is based on previously announced capacity dating back to 1988.
Falconbridge Limited Kidd Metallurgical Division P.O. Box 2002 Timmins, Ontario P4N 7K1 Contact: Mr. Claude Ferron Telephone: (705) 235-8121, ext. 7549 Facsimile: (705) 235-7318	Timmins, Ontario	32	4/9 grade ingots, 10 kg	The plant recovers the by-product from the electrostatic precipitator dust of the copper smelter.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
LEAD				
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	120 000 (refined lead) Varies	Refined lead "Tadanac Brand" in 56-lb and 100-lb pigs and 2000-lb jumbos Custom lead alloys in 56- and 100-lb pigs; 2000-lb jumbos	Concentrate is flash smelted. Slag is treated in fuming plant. Betts electrolytic process.
Noranda Inc. Brunswick Smelter 692 Main Street Belledune, New Brunswick E8G 2M1 Contact: Mr. Phil Evans Telephone: (506) 522-2100 Facsimile: (506) 522-7089	Belledune, New Brunswick	110 000	Refined lead and lead alloys "BM&S Brand" in 25-kg pigs plus 1-t jumbos	Conc. is sintered then smelted in a single blast furnace to produce lead bullion.
MAGNESIUM				
Norsk Hydro Canada Inc. 7000 Raoul-Duchesne Boulevard Bécancour, Quebec G0X 1B0 Contact: Mr. André Faucher Telephone: (819) 294-4546 Facsimile: (819) 294-9621	Bécancour, Quebec	45 000	Pure and alloyed magnesium in the form of ingot and large ingot	Smelter and foundry started up in late 1989. Plant site is capable of expansion to 240 000 t/y. Recycling plant.
Timminco Limited 10 Bay Street, 9th Floor Toronto, Ontario M5J 2R8 Telephone: (613) 432-3621	Haley Station, Ontario	7 000	High-purity magnesium and magnesium alloy, ingots, billets, extrusions and granules	Magnesium is produced by thermal methods involving reduction of calcined dolomite by ferrosilicon under high vacuum in gas-fired retort furnaces. Other metals produced are calcium and strontium.

MERCURY

Johnson Matthey Limited 130 Glidden Road Brampton, Ontario L6W 3M8 Telephone: (905) 453-6120	Brampton, Ontario	**	Distilled mercury	Technical double and triple distilled grades for industrial and dental uses.

MOLYBDENUM

Eldorado Gold Mines Inc. 2147 Portage Avenue Winnipeg, Manitoba R3J 0L4 Telephone: (204) 837-1383	Duparquet, Quebec	8 100 (contained Mo)	Molybdic oxide	Treats molybdenite concentrates (custom roasting).
Thompson Creek Mining Limited P.O. Box 4001 Fraser Lake, British Columbia V0J 1S0 Contact: Mr. Gord Coyle Telephone: (250) 699-6211, ext. 366 Facsimile: (250) 699-7775	Endako, 16 km W of Fraser Lake, British Columbia	7 300	Molybdenite conc., molybdic oxide, lubricant-grade molybdenum disulphide	Most of the molybdenite conc. is roasted to convert it to molybdic oxide and sold on domestic and foreign markets. Surplus roasting capacity is used for custom roasting. Some molybdenite conc. is refined to lubricant grade.

NICKEL

Cobalt Refinery Company Inc., The 10101 - 114th Street Box 2000 Fort Saskatchewan, Alberta T8L 4G6 Contact: Mr. Dennis Maschmeyer Telephone: (780) 992-7000 Facsimile: (780) 998-71	Fort Saskatchewan, Alberta	28 000	Refined nickel (briquettes and powder)	Proprietary hydrometallurgical plant employing ammonia leach and hydrogen reduction technology for processing nickel- and cobalt-containing feed materials into refined nickel and cobalt products. Ammonium sulphate, copper sulphide and zinc sulphide are also produced.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
NICKEL (cont'd)				
Falconbridge Limited Sudbury Division Falconbridge, Ontario P0M 1S0 Contact: Mr. A.G. Hayward Telephone: (705) 693-2761 Facsimile: (705) 699-3110	Falconbridge, Ontario	600 000 (conc.)	Copper-nickel matte	Copper-nickel conc. is roasted and then smelted in electric furnaces and converted to produce matte for shipment to the company's electrolytic refinery in Norway.
Inco Limited Suite 1500 145 King Street West Toronto, Ontario M5H 4B7	Copper Cliff, Ontario	• •	Copper-nickel bessemer matte	Oxygen flash smelting with two furnaces.
			Nickel sulphide and nickel oxide sinter for company's refineries; Nickel Oxide Sinter 75 for market	Nickel-copper sulphides are separated through flotation; nickel sulphide product is fluid-bed roasted to nickel oxide sinter for refining and marketing.
		60 900	Nickel pellets, nickel powders and iron-nickel pellets for market	Metallic copper-nickel conc. is refined by Kaldo top-blown rotary converters and Inco pressure carbonyl process.
	Port Colborne, Ontario	64 000	Nickel refinery residue, nickel sulphate	Recovered from copper tank house solutions.
	Thompson, Manitoba	9 500	Packed Inco electrolytic nickel squares and rounds	Packaging facility for Ontario and Manitoba Divisions' products.
		56 800	Copper concentrate	Fluidized bed roaster, electric furnace, Pierce Smith converters. Copper concentrate is shipped to Copper Cliff for refining.
			Inco electrolytic nickel	Electrolytic refining of nickel sulphide anodes to pure nickel cathodes for market. Cobalt oxide is also produced.

PRECIOUS METALS

Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kee Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	150 000 oz 22 000 000 oz	Gold bullion Silver "Tadanac Brand" in 1000-oz bars	Recovers precious metals from own and custom ores as a by-product of lead refinery. Also custom refining.
Golden West Refining (Canada) Ltd. 1500 Alberni Street Vancouver, British Columbia V6G 3C9 Contact: Mr. John Downie, President Telephone: (604) 946-4554, ext. 310 Facsimile: (604) 946-4523	Lot 30, Callison Estate, Dawson City, Yukon	• •	Refiners of gold, silver and platinum group metals, and producers of grain and bar	Producers and suppliers of precious metals and their alloys for use in the arts, by mints and industry, and for investment. Recovery of precious metals from scrap, dross, liquids, dore and high-grade concentrates. Product is 0.9999+ fine.
Handy & Harman of Canada, Limited 290 Carlingview Drive Rexdale, Ontario M9W 5G1 Contact: Mr. Keith Perrin Telephone: (416) 675-1860 Facsimile: (416) 675-1956	Toronto, Ontario	• •	Silver and gold refiners; silver and silver alloy sheet and wires; brazing alloys and solders	Precious metals and alloys are produced for use in the arts and industry. Recovery of precious metals from scrap and dross.
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-419	Flin Flon, Manitoba	• •	Anode copper containing gold and silver	Gold and silver are recovered from the anode copper at outside refineries.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
PRECIOUS METALS (cont'd)				
Imperial Smelting and Refining Co. of Canada Ltd. 451 Denison Street Markham, Ontario L3R 1B7 Contact: Mr. K. Mason Telephone: (905) 475-9566 Facsimile: (905) 475-0703	Markham, Ontario	**	Recovery and refining of gold, silver and platinum group metals from low-grade sweeps, scrap, dross and ores; producers of all precious metal products and their alloys for use in sheet, coin blanks, bars, wire, tubing, casting grains, solders, seamless welding blanks and findings	Canada's only platinum group metals refiner. Producer and supplier of 0.9999+ quality fine gold and specialty precious metal alloys.
Inco Limited Suite 1500 145 King Street West Toronto, Ontario M5H 4B7	Copper Cliff, Ontario	**	Fine gold, silver and platinum group metals intermediates	Recovered from copper anode slimes and nickel refinery residue.
Johnson Matthey Limited 130 Glidden Road Brampton, Ontario L6W 3M8 Telephone: (905) 453-6120	Brampton, Ontario	**	Refined gold, silver and platinum and group metals and alloys in sheet, coin blanks, bars, wire, tubing, salts, solders, etc., as well as other manufactured and semi-manufactured forms; minted items; platinum and platinum alloy laboratory apparatus and analytical-grade chemicals for analysis of minerals and metals	Producers and suppliers of precious metals and their alloys for use in the arts, by mints and industry, and for investment. Recovery of precious metals from scrap and dross.
			Refiners of gold, silver and platinum group metals; producers of precious metal chemicals	Treatment and refining of gold and silver ores and high-grade conc. Recovery of precious metals from industrial and jewellery scrap.
Noranda Inc. Brunswick Smelter 692 Main Street Belledune, New Brunswick E8G 2M1 Contact: Mr. Phil Evans Telephone: (506) 522-2100 Facsimile: (506) 522-7089	Belledune, New Brunswick	350 000 kg	Silver dore cast in anodes	Co-product of lead refinery.

Noranda Inc. CCR Division 220 Durocher Street Montréal-Est, Quebec H1B 5H6 Telephone: (514) 645-2311	Montréal-Est, Quebec	Gold 30 000 kg; silver 1 000 000 kg	"CCR Brand" fine gold and silver recovered electrolytically from slimes; gold - "kilo" bars and 400-oz bars	Recovered as by-products in the electrolytic refining of copper anodes produced at the Horne and Gaspé smelters and elsewhere.
Royal Canadian Mint 320 Sussex Drive Ottawa, Ontario K1A 0G8 Contact: Mr. David Madge Telephone: (519) 249-1540	Ottawa, Ontario	217 000 kg	Refiners of gold; gold products include coins, London Good Delivery 400-oz bars and 100-oz COMEX Good Delivery bars, as well as grain gold and shot for jewellery and electronics industries	Treats base bullion from Canadian, U.S. and foreign mines, as well as scrap, jewellery, etc. Customers' product is refined to 0.9999 fine.
Technic Inc. 1 - 3551 Vikingway Richmond, British Columbia V6V 1W1 Contact: Mr. Al Brodie Telephone: (604) 270-8778 Telephone: 1-800-555-1350 Facsimile: (604) 270-6529	Richmond, British Columbia	• •	Refiners of gold, silver and platinum group metals	Producers and suppliers of precious metals and their alloys for use in industry and for investment and electroplating chemicals and equipment. Recovery of precious metals from scrap. Company name changed from Engelhard Canada Limited.

SELENIUM AND TELLURIUM

Inco Limited Suite 1500 145 King Street West Toronto, Ontario M5H 4B7	Copper Cliff, Ontario	47 000 kg 8 200 kg	Selenium cake Tellurium dioxide cake	Recovered as by-products from slimes resulting from the electro-refining of copper.
Noranda Inc. CCR Division 220 Durocher Street Montréal-Est, Quebec H1B 5H6 Telephone: (514) 645-2311	Montréal-Est, Quebec	32 700 kg 700 000 kg	"Noranda Brand" commercial-grade tellurium powder, stick, lumps and tellurium dioxide "Noranda Brand" commercial-grade and high-purity selenium, selenious acid, sodium selenate, sodium selenite, and iron selenide	 Ceased production.

METALLURGICAL WORKS IN CANADA - NONFERROUS AND PRECIOUS METALS (cont'd)

Operator	Location of Plant	Annual Rated Capacity (tonnes)	Products	Remarks
STRONTIUM				
Timminco Limited 10 Bay Street, 9th Floor Toronto, Ontario M5J 2R8	Westmeath, Ontario	500	"Timminco Brand" strontium metal 99%; strontium-aluminum alloys	Oxide reduction process.
TITANIUM				
QIT Fer et Titane Inc. 1625 Marie-Victorin Highway Tracy, Quebec J3R 1M6	Tracy, Quebec	1 100 000	Titanium dioxide slag (SORELSLAG)	Smelts ilmenite ores from Allard Lake in nine electric furnaces to produce high-titanium dioxide slag (SORELSLAG) and high-purity pig iron (SORELMETAL).
Contact: Mr. Terry Bowles Telephone: (450) 746-3071 Facsimile: (450) 746-1101		200 000	High-purity titania slag (UGS)	The SORELSLAG slag is beneficiated by a chemical process to produce a titanium dioxide conc. (UGS).
		440 000	Steel billets (SORELSTEEL)	
		900 000	Pig iron (SORELMETAL)	
URANIUM				
Cameco Corporation 2121 - 11th Street West Saskatoon, Saskatchewan S7M 1J3	Blind River, Ontario	18 000 tU	Uranium as uranium trioxide powder - natural	Uranium mill conc. (tri-uranium octoxide) is refined to nuclear-purity uranium trioxide through solvent extraction and shipped to Port Hope for conversion.
Contact: Mr. B. Steane Telephone: (905) 885-4511 Facsimile: (905) 885-9124	Port Hope, Ontario	2 000 tU	Uranium metal and alloys - natural and depleted	Magnesium reduction is used to reduce uranium tetrafluoride to metal. Vacuum melting, casting and machining to various forms.
		12 500 tU	Uranium as uranium hexafluoride - natural	Uranium trioxide is converted to uranium hexafluoride for export markets.
		2 800 tU	Uranium as ceramic uranium dioxide powder - natural	Uranium trioxide is converted to uranium dioxide, ready for pressing and sintering to form pellets for CANDU reactor fuel.

ZINC

Canadian Electrolytic Zinc Limited (div. of Noranda Inc.) 860 Cadieux Boulevard Valleyfield, Quebec J6S 4W2 Contact: Ms. Mary Deeley Telephone: (416) 982-7249 Facsimile: (416) 982-7498	Valleyfield, Quebec	255 000	Slab zinc "CEZ Brand" in all grades; regular and jumbo shapes, and shot; zinc powder	Roasting of zinc conc. with production of sulphuric acid. Leaching of calcine and electrowinning of zinc. Cathode zinc is melted and cast according to customer specifications.
Cominco Ltd. 500 - 200 Burrard Street Vancouver, British Columbia V6C 3L7 Contact: Ms. Kea Barker Telephone: (604) 682-0611 Facsimile: (604) 685-3019	Trail, British Columbia	290 000	Zinc "Tadanac Brand" in 56-lb slabs in industry-recognized grades; strip jumbos, in several different alloy grades, 2400 lb each; C-cast jumbos, 2400-lb and 23-lb slabs of die-cast alloy.	Roasting or pressure leaching of zinc conc. followed by leaching, solution purification and refined zinc production by electrolysis. Cathodes are melted and cast.
Falconbridge Limited Kidd Metallurgical Division P.O. Box 2002 Timmins, Ontario P4N 7K1 Contact: Mr. A.G. Hayward Telephone: (705) 693-2761 Facsimile: (705) 699-3110	Timmins, Ontario	145 000	Slab zinc, special high grade, high grade, and prime western of "Kidd Brand" in 55-lb slabs and various jumbo ingots	Roasting of zinc conc., leaching and electrolysis of solution. Cathodes are melted and cast to customer needs.
Hudson Bay Mining and Smelting Co., Limited P.O. Box 1500 Flin Flon, Manitoba R8A 1N9 Contact: Mr. Gary Allen Telephone: (204) 687-2366 Facsimile: (204) 687-4193	Flin Flon, Manitoba	100 000 zinc	Slab zinc, special high grade, prime western, zinc alloys	Two-stage pressure leaching of zinc flotation concentrate followed by are refined zinc production by electrolysis. Cathodes melted and zinc cast in slabs and blocks. Additional concentrates are purchased and processed to metal in the zinc metallurgical plant.